

# ELIAS

## Mathematics

**3<sup>rd</sup> primary – Second term**

**2023**

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# Index

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<b>Chapter 1</b>	<b>Multiplication and division</b>	
Lesson 1	Multiplication equation	1
Lesson 2	Properties of multiplication	2
Lesson 3	Estimate the product	11
Lesson 4	Division	12
Lesson 5	Relation between multiplication and division	14
<b>Chapter 2</b>	<b>Fractions</b>	
Lesson 1	Fractions	21
Lesson 2	Unit fraction	30
Lesson 3	Properties of fractions	34
Lesson 4	Fractions story problems	37
<b>Chapter 3</b>	<b>Comparing fractions &amp; add and subtract fractions</b>	
Lesson 1	Ways to represent fractions	40
Lesson 2	Comparing proper fractions	43
Lesson 3	Ordering fractions on number line	48
Lesson 4	Adding and subtracting fractions with common denominator	50
Lesson 5	Fractions story problems	56

<b>Chapter 4</b>	<b>Equivalent fractions</b>	
Lesson 1	Equivalent fractions	59
Lesson 2	Find the missing equivalent fraction	63
<b>Chapter 5</b>	<b>Perimeter and area of rectangle and square</b>	
Lesson 1	Perimeter and area	69
Lesson 2	Find the missing length or width of rectangle or square	71
Lesson 3	Perimeter and area of complex figures	76
<b>Chapter 6</b>	<b>Revision</b>	
Revision 1	Place value and value	79
Revision 2	Forms of the number	84
Revision 3	Comparing and ordering numbers	88
Revision 4	Graphs	92
Revision 5	Measuring length	95
Revision 6	Elapsed time	96
Revision 7	Main four operations	99
<b>Final assessments</b>	<b>Exam models</b>	
Assessment 1	Model 1	103
Assessment 2	Model 2	105
Assessment 3	Model 3	107

# ELIAS

## Chapter 1

- Lesson 1**      *Multiplication equation*
- Lesson 2**      *Properties of multiplication*
- Lesson 3**      *Estimate the product*
- Lesson 4**      *Division*
- Lesson 5**      *Relation between multiplication and division*



**Revision:** *Multiplication tables*

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**Multiples of 1**    1 , 2 , 3 , 4 , 5 , 6 , 7 , 8 , 9 , 10

**Multiples of 2**    2 , 4 , 6 , 8 , 10 , 12 , 14 , 16 , 18 , 20

**Multiples of 3**    3 , 6 , 9 , 12 , 15 , 18 , 21 , 24 , 27 , 30

**Multiples of 4**    4 , 8 , 12 , 16 , 20 , 24 , 28 , 32 , 36 , 40

**Multiples of 5**    5 , 10 , 15 , 20 , 25 , 30 , 35 , 40 , 45 , 50

**Multiples of 6**    6 , 12 , 18 , 24 , 30 , 36 , 42 , 48 , 54 , 60

**Multiples of 7**    7 , 14 , 21 , 28 , 35 , 42 , 49 , 56 , 63 , 70

**Multiples of 8**    8 , 16 , 24 , 32 , 40 , 48 , 56 , 64 , 72 , 80

**Multiples of 9**    9 , 18 , 27 , 36 , 45 , 54 , 63 , 72 , 81 , 90

**Multiples of 10**    10 , 20 , 30 , 40 , 50 , 60 , 70 , 80 , 90 , 100

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# Lesson 1

## Multiplication equation



### Multiplication equation

- **Multiplication** is a repeated addition of the same number.

3	3	3	3	3
---	---	---	---	---

$$5 \times 3$$

$$3 + 3 + 3 + 3 + 3$$

$$5 \times 3$$

### 1 Write the multiplication equation:

4	4	4	4	4	4
---	---	---	---	---	---

$$\dots \times \dots$$

$$2 + 2 + 2 + 2$$

$$\dots \times \dots$$

2	2	2
---	---	---

$$\dots \times \dots$$

$$1 + 1 + 1 + 1 + 1 + 1 + 1 + 1$$

$$\dots \times \dots$$

7	7	7	7	7	7	7	7
---	---	---	---	---	---	---	---

$$\dots \times \dots$$

$$5 + 5 + 5$$

$$\dots \times \dots$$

6	6	6	6	6
---	---	---	---	---

$$\dots \times \dots$$

$$9 + 9 + 9 + 9 + 9 + 9$$

$$\dots \times \dots$$

3	3	3	3	3	3	3
---	---	---	---	---	---	---

$$\dots \times \dots$$

$$8 + 8 + 8 + 8 + 8$$

$$\dots \times \dots$$

### 1

#### Main objectives:

- Write multiplication equation.

## Lesson 2

## properties of multiplication



### Commutative property

**Ex:**  $3 \times 5 = 5 \times 3$

#### 1 Complete:

$5 \times 6 = \dots \times 5$

$14 \times 2 = \dots \times 14$

$2 \times 6 = \dots \times \dots$

$7 \times \dots = 3 \times 7$

$20 \times 50 = \dots \times 20$

$\dots \times \dots = 9 \times 3$

$4 \times 3 = 3 \times \dots$

$8 \times \dots = 20 \times 8$

$7 \times 4 = \dots \times \dots$

$\dots \times 9 = 9 \times 1$

$17 \times 3 = 3 \times \dots$

$10 \times 31 = \dots \times \dots$

$0 \times \dots = 8 \times 0$

$\dots \times 10 = 10 \times 5$

$\dots \times \dots = 42 \times 1$

#### 2 Choose:

a) Which of the following represent **commutative property**?

$3 \times 4 = 12$

$4 \times 5 = 5 \times 4$

$8 \times 0$

b) Which of the following represent **commutative property**?

$11 \times 3 = 3 \times 11$

$3 \times 1 = 3$

$7 \times 7$

c) Which of the following represent **commutative property**?

$7 + 0 = 7$

$2 \times 2 = 4$

$1 \times 9 = 1 \times 9$

d) Which of the following represent **commutative property**?

$3 \times 3$

$6 \times 4 = 4 \times 6$

$9 \times 10 = 90$

e) Which of the following represent **commutative property**?

$8 \times 5 = 5 \times 8$

$6 \times 8 = 48$

$12 = 10 + 2$

#### Main objectives:

- Apply the commutative property of multiplication to solve problems.

## properties of multiplication



### Associative property

- We can use associative property when we multiply 3 or more numbers.

$$3 \times 5 \times 2$$

$$3 \times 5 \times 2 \text{ or } (3 \times 5) \times 2 \text{ or } 3 \times (5 \times 2)$$

### 1 Complete:

$$(4 \times 5) \times 3 = \dots \times (5 \times 3)$$

$$(8 \times \dots) \times 5 = 8 \times (0 \times 5)$$

$$(6 \times 1) \times 8 = 6 \times (1 \times \dots)$$

$$(9 \times 3) \times 7 = 9 \times (\dots \times 7)$$

$$(7 \times 9) \times 2 = 7 \times (\dots \times 2)$$

$$(6 \times 3) \times \dots = 6 \times (3 \times 8)$$

$$(4 \times \dots) \times 6 = 4 \times (5 \times 6)$$

$$(\dots \times 4) \times 8 = 2 \times (4 \times 8)$$

$$(\dots \times 9) \times 5 = 3 \times (9 \times 5)$$

$$(7 \times 5) \times 3 = 7 \times (5 \times \dots)$$

$$(1 \times 3) \times 2 = \dots \times (3 \times 2)$$

$$(1 \times 6) \times 7 = \dots \times (6 \times 7)$$

### 2 Choose:

a) Which of the following represent associative property?

$$(4 \times 2) \times 5 = 4 \times (2 \times 5)$$

$$3 \times 5 = 5 \times 3$$

$$9 \times 0$$

b) Which of the following represent associative property?

$$8 \times 4 = 4 \times 8$$

$$(6 \times 1) \times 7 = 6 \times (1 \times 7)$$

$$8 \times 8$$

c) Which of the following represent associative property?

$$(2 \times 5) \times 7 = 2 \times (5 \times 7)$$

$$7 \times 7 = 49$$

$$2 \times 9 = 2 \times 9$$

### 3

#### Main objectives:

- Apply the Associative property of multiplication to solve problems.



### Exercises: Associative property

d) Which of the following represent associative property?

$6 \times 6$

$1 \times 8 = 8 \times 1$

$(3 \times 6) \times 9 = 3 \times (6 \times 9)$

e) Which of the following represent associative property?

$9 \times 7 = 7 \times 9$

$(2 \times 4) \times 8 = 2 \times (4 \times 8)$

$22 = 20 + 2$

### 3 Find the product:

$3 \times 1 \times 2$

= .....

$4 \times 2 \times 9$

= .....

$4 \times 2 \times 3$

= .....

$2 \times 1 \times 6$

= .....

$2 \times 3 \times 5$

= .....

$0 \times 2 \times 3$

= .....

$7 \times 3 \times 2$

= .....

$7 \times 4 \times 2$

= .....

$2 \times 2 \times 3$

= .....

$3 \times 3 \times 4$

= .....

$7 \times 1 \times 4$

= .....

$6 \times 2 \times 2$

= .....

$5 \times 4 \times 2$

= .....

$3 \times 1 \times 8$

= .....

### Main objectives:

- Apply the Associative property of multiplication to solve problems.

## properties of multiplication



### Distributive property

- We can decompose a multiplication problem into two or more smaller problems, and then add their products to get the final answer.



$$3 \times 14$$

EX:  $3 \times 14 = 3 \times (10 + 4)$   
 $= (3 \times 10) + (3 \times 4)$   
 $= 30 + 12 = 42$

#### 1 Find the product:

$$\begin{aligned} 4 \times 12 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 3 \times 17 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 5 \times 32 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 2 \times 41 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 3 \times 53 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 5 \times 16 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 2 \times 18 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 6 \times 24 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 7 \times 13 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 4 \times 62 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

- Apply the distributive property of multiplication to solve problems.

## Exercises: Distributive property

$$\begin{aligned} 5 \times 48 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 4 \times 35 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 5 \times 81 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 2 \times 67 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 6 \times 93 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 4 \times 32 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 3 \times 26 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 5 \times 33 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 7 \times 56 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 2 \times 19 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 6 \times 73 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 3 \times 22 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 4 \times 45 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 7 \times 64 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 8 \times 11 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 5 \times 17 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 3 \times 64 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

$$\begin{aligned} 9 \times 21 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

### Main objectives:

- Apply the distributive property of multiplication to solve problems.

## properties of multiplication



### Multiplying by 1

- Any number  $\times 1$  = the same number.

**Ex:**  $5 \times 1 = 5$

#### 1 Find the product:

$3 \times 1 = \dots\dots$

$44 \times 1 = \dots\dots$

$1 \times 20 = \dots\dots$

$7 \times 1 = \dots\dots$

$1 \times 235 = \dots\dots$

$18 \times 1 = \dots\dots$

$1 \times 8 = \dots\dots$

$9 \times 1 = \dots\dots$

$1 \times 1 = \dots\dots$

$1 \times 10 = \dots\dots$

$1 \times 0 = \dots\dots$

$122 \times 1 = \dots\dots$

$12 \times 1 = \dots\dots$

$1 \times 16 = \dots\dots$

$1 \times 11 = \dots\dots$



### Multiplying by 0

- Any number  $\times 0 = 0$

**Ex:**  $6 \times 0 = 0$

#### 1 Find the product:

$5 \times 0 = \dots\dots$

$453 \times 0 = \dots\dots$

$0 \times 36 = \dots\dots$

$8 \times 0 = \dots\dots$

$0 \times 7 = \dots\dots$

$0 \times 120 = \dots\dots$

$0 \times 1 = \dots\dots$

$33 \times 0 = \dots\dots$

$0 \times 0 = \dots\dots$

$14 \times 0 = \dots\dots$

$9 \times 0 = \dots\dots$

$24 \times 0 = \dots\dots$

$0 \times 10 = \dots\dots$

$0 \times 1 = \dots\dots$

$0 \times 2 = \dots\dots$

#### Main objectives:

- Apply the multiplying by 1 property to solve problems.
- Apply the multiplying by 0 property to solve problems.

## properties of multiplication



### Multiplying by 10 and its multiples

- When we multiply by 10s, we multiply the numbers then add zeroes.

**Ex:**  $50 \times 100 = 5,000$

#### 1 Find the product:

$3 \times 100 = \dots\dots$

$5 \times 1,000 = \dots\dots$

$5 \text{ tens} = \dots\dots$

$4 \times 10 = \dots\dots$

$100 \times 205 = \dots\dots$

$33 \text{ hundreds} = \dots$

$26 \times 1,000 = \dots\dots$

$300 \times 8 = \dots\dots$

$4 \text{ thousands} = \dots$

$20 \times 30 = \dots\dots$

$20 \times 200 = \dots\dots$

$3 \times 5 \text{ tens} = \dots\dots$

$100 \times 100 = \dots\dots$

$6 \times 30 = \dots\dots$

$30 \text{ hundreds} \times 6 = \dots\dots$

$10 \times 15 = \dots\dots$

$10 \times 108 = \dots\dots$

$6 \text{ thousands} \times 20 = \dots\dots$

$640 \times 10 = \dots\dots$

$70 \times 100 = \dots\dots$

$80 \times 4 \text{ hundreds} = \dots\dots$

$5 \times 200 = \dots\dots$

$10 \times 11 = \dots\dots$

$3 \text{ ten thousands} = \dots\dots$

$40 \times 300 = \dots\dots$

$60 \times 60 = \dots\dots$

$5 \text{ tens} \times 100 = \dots\dots$

$6 \times 10 = \dots\dots$

$550 \times 100 = \dots\dots$

$6 \text{ hundreds} \times 20 = \dots\dots$

$32 \times 1,000 = \dots\dots$

$40 \times 50 = \dots\dots$

$720 \text{ hundreds} = \dots\dots$

$2 \times 600 = \dots\dots$

$382 \times 100 = \dots\dots$

$80 \times 2 \text{ tens} = \dots\dots$

$100 \times 352 = \dots\dots$

$3090 \times 10 = \dots\dots$

$4 \text{ hundreds} \times 3 \text{ tens} = \dots$

$10 \times 50 = \dots\dots$

$2,000 \times 100 = \dots\dots$

$7 \text{ thousands} \times 10 = \dots\dots$

#### Main objectives:

- Apply multiplying by 10s to solve problems.

## Exercises: Multiplication

### 1 Find the product:

$4 \times 3 = \dots\dots\dots$

$5 \times 2 = \dots\dots\dots$

$3 \times 0 = \dots\dots\dots$

$0 \times 4 = \dots\dots\dots$

$6 \times 1 = \dots\dots\dots$

$8 \times 9 = \dots\dots\dots$

$8 \times 5 = \dots\dots\dots$

$3 \times 9 = \dots\dots\dots$

$2 \times 8 = \dots\dots\dots$

$1 \times 9 = \dots\dots\dots$

$2 \times 6 = \dots\dots\dots$

$6 \times 7 = \dots\dots\dots$

$7 \times 0 = \dots\dots\dots$

$9 \times 1 = \dots\dots\dots$

$0 \times 8 = \dots\dots\dots$

$5 \times 4 = \dots\dots\dots$

$8 \times 6 = \dots\dots\dots$

$3 \times 4 = \dots\dots\dots$

$6 \times 8 = \dots\dots\dots$

$7 \times 1 = \dots\dots\dots$

$1 \times 7 = \dots\dots\dots$

$2 \times 4 = \dots\dots\dots$

$9 \times 8 = \dots\dots\dots$

$6 \times 2 = \dots\dots\dots$

$9 \times 7 = \dots\dots\dots$

$1 \times 1 = \dots\dots\dots$

$8 \times 1 = \dots\dots\dots$

$7 \times 2 = \dots\dots\dots$

$6 \times 9 = \dots\dots\dots$

$5 \times 5 = \dots\dots\dots$

$3 \times 3 = \dots\dots\dots$

$4 \times 2 = \dots\dots\dots$

$9 \times 9 = \dots\dots\dots$

$8 \times 4 = \dots\dots\dots$

$0 \times 6 = \dots\dots\dots$

$2 \times 5 = \dots\dots\dots$

$1 \times 6 = \dots\dots\dots$

$3 \times 5 = \dots\dots\dots$

$0 \times 7 = \dots\dots\dots$

$2 \times 0 = \dots\dots\dots$

$7 \times 9 = \dots\dots\dots$

$4 \times 4 = \dots\dots\dots$

$3 \times 8 = \dots\dots\dots$

$2 \times 9 = \dots\dots\dots$

$6 \times 0 = \dots\dots\dots$

## Exercises: Multiplication

$9 \times 2 = \dots\dots\dots$

$2 \times 1 = \dots\dots\dots$

$4 \times 7 = \dots\dots\dots$

$3 \times 7 = \dots\dots\dots$

$7 \times 7 = \dots\dots\dots$

$5 \times 8 = \dots\dots\dots$

$6 \times 5 = \dots\dots\dots$

$9 \times 6 = \dots\dots\dots$

$2 \times 7 = \dots\dots\dots$

$5 \times 9 = \dots\dots\dots$

$3 \times 0 = \dots\dots\dots$

$8 \times 0 = \dots\dots\dots$

$1 \times 3 = \dots\dots\dots$

$5 \times 7 = \dots\dots\dots$

$7 \times 4 = \dots\dots\dots$

$8 \times 3 = \dots\dots\dots$

$9 \times 3 = \dots\dots\dots$

$1 \times 8 = \dots\dots\dots$

$4 \times 0 = \dots\dots\dots$

$3 \times 1 = \dots\dots\dots$

$6 \times 4 = \dots\dots\dots$

$7 \times 5 = \dots\dots\dots$

$7 \times 3 = \dots\dots\dots$

$5 \times 1 = \dots\dots\dots$

$3 \times 2 = \dots\dots\dots$

$1 \times 2 = \dots\dots\dots$

$4 \times 5 = \dots\dots\dots$

$8 \times 8 = \dots\dots\dots$

$8 \times 7 = \dots\dots\dots$

$0 \times 3 = \dots\dots\dots$

$2 \times 2 = \dots\dots\dots$

$5 \times 3 = \dots\dots\dots$

$2 \times 3 = \dots\dots\dots$

$9 \times 4 = \dots\dots\dots$

$6 \times 3 = \dots\dots\dots$

$9 \times 5 = \dots\dots\dots$

$8 \times 3 = \dots\dots\dots$

$5 \times 6 = \dots\dots\dots$

$4 \times 9 = \dots\dots\dots$

$1 \times 5 = \dots\dots\dots$

$7 \times 6 = \dots\dots\dots$

$4 \times 8 = \dots\dots\dots$

$4 \times 6 = \dots\dots\dots$

$3 \times 6 = \dots\dots\dots$

$1 \times 4 = \dots\dots\dots$

$0 \times 9 = \dots\dots\dots$

$8 \times 2 = \dots\dots\dots$

$9 \times 0 = \dots\dots\dots$

$4 \times 1 = \dots\dots\dots$

$0 \times 1 = \dots\dots\dots$

$7 \times 8 = \dots\dots\dots$

### Main objectives:

- Solve multiplication problems.

## Lesson 3

## Estimate the product



### Estimation

- **Estimation** is giving a closer answer not the exact answer.

**Ex:**  $9 \times 5 =$

**Estimation:** 50

**Actual product:** 45

### 1 Find the product:

Estimation .....	$4 \times 9$	Actual product .....
Estimation .....	$8 \times 3$	Actual product .....
Estimation .....	$9 \times 12$	Actual product .....
Estimation .....	$17 \times 8$	Actual product .....
Estimation .....	$15 \times 9$	Actual product .....
Estimation .....	$9 \times 7$	Actual product .....
Estimation .....	$8 \times 16$	Actual product .....

- Estimate the product.





### division equation

- **Divide** is distributing some things into equal parts.



Each rappid get 4 carrots.

$$8 \div 2 = 4$$

dividend      divisor      quotient

#### 1 Find the quotient:

$14 \div 7 = \dots\dots\dots$

$35 \div 5 = \dots\dots\dots$

$81 \div 9 = \dots\dots\dots$

$42 \div 6 = \dots\dots\dots$

$32 \div 4 = \dots\dots\dots$

$45 \div 5 = \dots\dots\dots$

$40 \div 5 = \dots\dots\dots$

$21 \div 3 = \dots\dots\dots$

$16 \div 4 = \dots\dots\dots$

$24 \div 4 = \dots\dots\dots$

$63 \div 7 = \dots\dots\dots$

$36 \div 4 = \dots\dots\dots$

$32 \div 8 = \dots\dots\dots$

$72 \div 8 = \dots\dots\dots$

$27 \div 9 = \dots\dots\dots$

$12 \div 2 = \dots\dots\dots$

$18 \div 9 = \dots\dots\dots$

$10 \div 2 = \dots\dots\dots$

$15 \div 3 = \dots\dots\dots$

$2 \div 1 = \dots\dots\dots$

$12 \div 6 = \dots\dots\dots$

$15 \div 5 = \dots\dots\dots$

$40 \div 8 = \dots\dots\dots$

$20 \div 4 = \dots\dots\dots$

$18 \div 3 = \dots\dots\dots$

$48 \div 8 = \dots\dots\dots$

$21 \div 7 = \dots\dots\dots$

$64 \div 8 = \dots\dots\dots$

$4 \div 2 = \dots\dots\dots$

$30 \div 5 = \dots\dots\dots$

#### Main objectives:

- Write division equation
- Solve division problems.

## Exercises: Division

$24 \div 3 = \dots\dots\dots$

$28 \div 7 = \dots\dots\dots$

$16 \div 8 = \dots\dots\dots$

$6 \div 3 = \dots\dots\dots$

$80 \div 10 = \dots\dots\dots$

$6 \div 1 = \dots\dots\dots$

$18 \div 2 = \dots\dots\dots$

$27 \div 3 = \dots\dots\dots$

$36 \div 6 = \dots\dots\dots$

$7 \div 1 = \dots\dots\dots$

$6 \div 2 = \dots\dots\dots$

$9 \div 3 = \dots\dots\dots$

$60 \div 10 = \dots\dots\dots$

$42 \div 7 = \dots\dots\dots$

$8 \div 4 = \dots\dots\dots$

$12 \div 3 = \dots\dots\dots$

$20 \div 10 = \dots\dots\dots$

$9 \div 1 = \dots\dots\dots$

$7 \div 7 = \dots\dots\dots$

$56 \div 8 = \dots\dots\dots$

$8 \div 8 = \dots\dots\dots$

$54 \div 6 = \dots\dots\dots$

$24 \div 6 = \dots\dots\dots$

$40 \div 10 = \dots\dots\dots$

$2 \div 2 = \dots\dots\dots$

$3 \div 1 = \dots\dots\dots$

$16 \div 2 = \dots\dots\dots$

$63 \div 9 = \dots\dots\dots$

$35 \div 7 = \dots\dots\dots$

$45 \div 9 = \dots\dots\dots$

$25 \div 5 = \dots\dots\dots$

$10 \div 5 = \dots\dots\dots$

$1 \div 1 = \dots\dots\dots$

$12 \div 4 = \dots\dots\dots$

$28 \div 4 = \dots\dots\dots$

$8 \div 2 = \dots\dots\dots$

$48 \div 6 = \dots\dots\dots$

$24 \div 8 = \dots\dots\dots$

$54 \div 9 = \dots\dots\dots$

$18 \div 6 = \dots\dots\dots$

$72 \div 9 = \dots\dots\dots$

$20 \div 5 = \dots\dots\dots$

$49 \div 7 = \dots\dots\dots$

$5 \div 5 = \dots\dots\dots$

$56 \div 7 = \dots\dots\dots$

$36 \div 9 = \dots\dots\dots$

$14 \div 2 = \dots\dots\dots$

$12 \div 6 = \dots\dots\dots$

# Lesson 5

## Relation between multiplication and division



### Relation between multiplication and division

- Division is the inverse operation of multiplication.

#### Multiplication equation

$$3 \times 4 = 12$$

factor   factor   product

#### Division equation

$$12 \div 3 = 4$$

dividend   divisor   quotient



### Fact family

- Fact family** is a set of related multiplication and division equations using the same numbers.

#### Fact family for 3, 5, 15

$$3 \times 5 = 15$$

$$15 \div 3 = 5$$

$$5 \times 3 = 15$$

$$15 \div 5 = 3$$

### 1 Write the fact family for each set of numbers:

2   5   10

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

6   3   18

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

4   5   20

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

5   7   35

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

4   6   24

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

9   3   27

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

2   8   16

....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

5   5   25

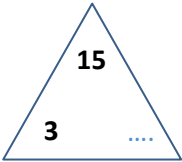
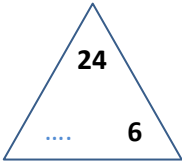
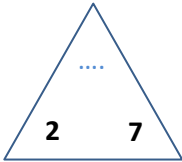
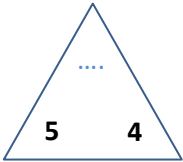
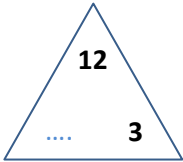
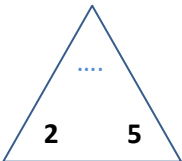
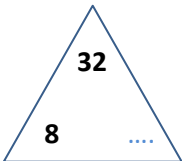
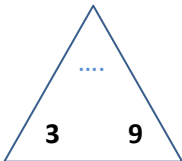
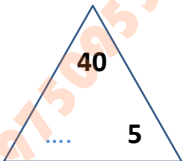
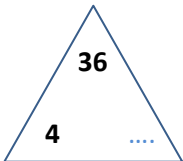
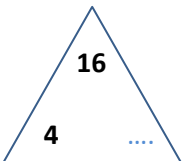
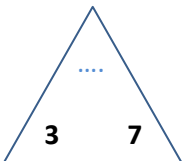
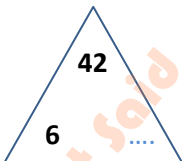
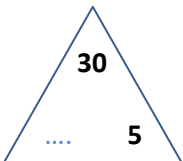
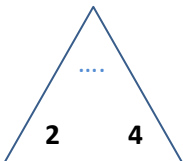
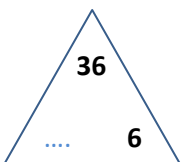
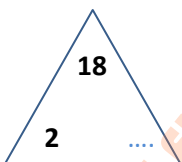
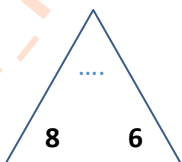
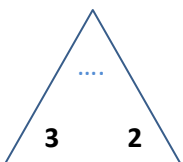
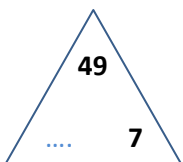
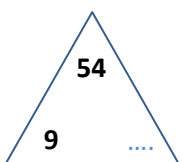
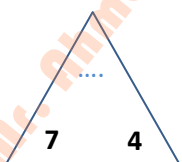
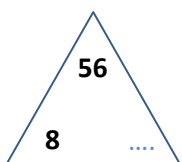
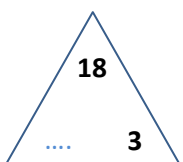
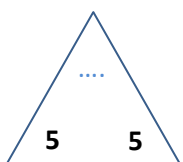
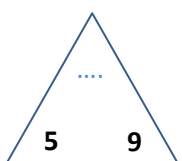
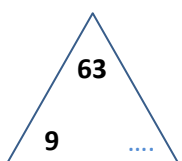
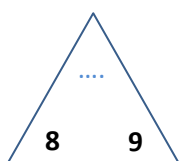
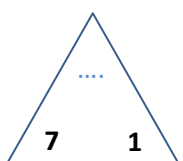
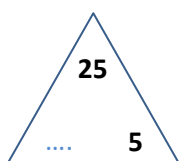
....	×	....	=	....
....	×	....	=	....
....	÷	....	=	....
....	÷	....	=	....

### Main objectives:

- Identify the relation between multiplication and division.
- Identify fact family.

**Exercises:** Relation between multiplication and division

**2 Find the missing number:**

- Use models to find the missing number.

## Exercises: Relation between multiplication and division

### 3 Find the missing number:

$$\dots \times 4 = 12$$

$$6 \times \dots = 54$$

$$21 \div \dots = 3$$

$$2 \times \dots = 8$$

$$28 \div \dots = 7$$

$$\dots \div 6 = 3$$

$$36 \div \dots = 6$$

$$\dots \times 7 = 14$$

$$7 \times \dots = 56$$

$$\dots \times 5 = 20$$

$$18 \div 2 = \dots$$

$$7 \times 7 = \dots$$

$$\dots \div 5 = 6$$

$$\dots \div 4 = 8$$

$$\dots \times 6 = 42$$

$$3 \times \dots = 15$$

$$\dots \times 7 = 35$$

$$5 \div \dots = 5$$

$$12 \div \dots = 6$$

$$8 \times 2 = \dots$$

$$9 \times \dots = 45$$

$$\dots \times 8 = 24$$

$$25 \div \dots = 5$$

$$10 \div 5 = \dots$$

$$6 \div 2 = \dots$$

$$8 \times \dots = 48$$

$$\dots \times 8 = 64$$

$$\dots \div 7 = 1$$

$$\dots \div 8 = 9$$

$$\dots \div 4 = 4$$

$$9 \div \dots = 3$$

$$\dots \times 3 = 18$$

$$4 \times \dots = 16$$

$$5 \times \dots = 40$$

$$4 \div 4 = \dots$$

$$6 \times 4 = \dots$$

$$7 \times 9 = \dots$$

$$27 \div \dots = 9$$

$$49 \div \dots = 7$$

$$\dots \div 1 = 9$$

$$1 \times \dots = 8$$

$$\dots \times 9 = 81$$

$$2 \times 5 = \dots$$

$$\dots \div 2 = 9$$

$$\dots \div 2 = 1$$

### Main objectives:

- Find the missing number.



### Multistep problems

- **Multistep problem** is a problem that involves more than one operation.

#### Example:

Sara bought 3 packs of crayons. Each pack contains 6 crayons. If she gave her friends 10 crayons of them.

How many crayons are left?

**Solve:**  $(3 \times 6) - 10 = 18 - 10 = 8$  crayon

#### 1 Answer the following:

- a) Farida's father gave her 20 pounds. She bought a snack for 5 pounds and a biscuit for 2 pounds. **How much money is left with her?**

.....  
 .....

- b) Ali saves 5 pounds every day for 7 days. Then his mother gave him 40 pounds. **How much all money he has?**

.....  
 .....

- c) Elias bought 3 packets of biscuit each pack contains 4 pieces. He needs to distribute them equally between 2 friends. **How many pieces each one get?**

.....  
 .....

- d) Moustafa and Logy went to the supermarket. Mousatafa bought 3 pencils with 2 pound for each .Logy bought 4 pencils with 5 pounds for each. **How much money that they paid together?**

.....  
 .....

- Solve multistep problems.

1 Choose:

a) Which of the following represent associative property?

$8 \times 4 = 4 \times 8$

$(6 \times 1) \times 7 = 6 \times (1 \times 7)$

$8 \times 8$

b) Which of the following represent commutative property?

$11 \times 3 = 3 \times 11$

$3 \times 1 = 3$

$7 \times 7$

c) Which of the following represent  $3 \times 4$ ?

$3 \times 3 \times 3 \times 3$

$4 + 4 + 4 + 4 + 4$

$3 + 3 + 3 + 3$

d)  $6 \times 14 = 6 \times ( \dots + 4 )$

$8$

$10$

$12$

e) The following equation  $5 \times 3 = 3 \times 5$  is representing ..... Property.  
commutative                      associative                      distributive

f) The following equation  $3 \times ( 4 \times 6 ) = ( 3 \times 4 ) \times 6$  is representing  
..... property  
commutative                      associative                      distributive

2 Complete:

a) The following equation  $8 \times 4 = 4 \times 8$  is representing ..... Property.

b)  $6 \times 2 \times 4 = \dots$

c) The product of 3 times 5 is .....

d)  $8 \times 27 = 8 \times ( 20 + \dots )$

e)  $3 \times \dots = 30$

f) The quotient of 27 divided by 3 is .....

g)  $42 \div \dots = 7$

3 Answer the following:

$6 \times 3 = \dots\dots\dots$

$9 \times 1 = \dots\dots\dots$

$3 \text{ hundreds} = \dots\dots\dots$

$0 \times 8 = \dots\dots\dots$

$60 \times 100 = \dots\dots\dots$

$4 \times 7 = \dots\dots\dots$

$14 \div 2 = \dots\dots\dots$

$90 \div 10 = \dots\dots\dots$

$8 \div 1 = \dots\dots\dots$

$5 \div 5 = \dots\dots\dots$

$27 \div 3 = \dots\dots\dots$

$8 \div 4 = \dots\dots\dots$

$\dots\dots \times 3 = 12$

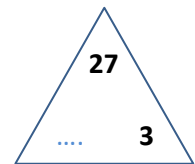
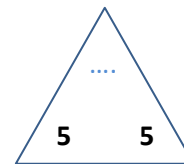
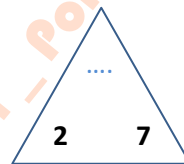
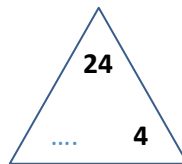
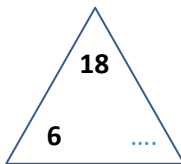
$9 \times \dots\dots = 54$

$21 \div \dots\dots = 7$

$2 \times \dots\dots = 8$

$14 \div \dots\dots = 7$

$\dots\dots \div 6 = 3$



$$\begin{aligned} 3 \times 62 &= \dots\dots \times (\dots\dots + \dots\dots) \\ &= (\dots\dots \times \dots\dots) + (\dots\dots \times \dots\dots) \\ &= \dots\dots + \dots\dots = \dots\dots \end{aligned}$$

$$\begin{aligned} 5 \times 74 &= \dots\dots \times (\dots\dots + \dots\dots) \\ &= (\dots\dots \times \dots\dots) + (\dots\dots \times \dots\dots) \\ &= \dots\dots + \dots\dots = \dots\dots \end{aligned}$$

Hana bought 3 kilograms of orang, the price of each kilogram is 5 pounds, Kenzy bought 2 kilograms of mango the price of each kilogram is 10 pounds. **How much money did they pay all together?**

.....

.....

.....



# ELIAS

## Chapter 2

- Lesson 1**      *Fractions*
- Lesson 2**      *Unit fraction*
- Lesson 3**      *Properties of fractions*
- Lesson 4**      *Fractions story problems*





## Fraction

- **Fraction** represents the parts of a whole.









$\frac{3}{5}$  ← **Numerator**  
 ← **Denominator**

**Numerator:** the top number that tells the number of equal parts you have (shaded parts).

**Denominator:** the bottom number that tells the number of all equal parts.



## Writing and reading fraction

Model of fraction	Writing fraction	Reading fraction
	1	whole one
	$\frac{1}{2}$	one half
	$\frac{1}{3}$	one third
	$\frac{1}{4}$	one fourth
	$\frac{1}{5}$	one fifth
	$\frac{1}{6}$	one sixth

### Main objectives:

- Identify the meaning of fractions.
- How to write and read the fraction.

# Fractions

$\frac{1}{7}$											$\frac{1}{7}$	one seventh
$\frac{1}{8}$											$\frac{1}{8}$	one eighth
$\frac{1}{9}$											$\frac{1}{9}$	one ninth
$\frac{1}{10}$											$\frac{1}{10}$	one tenth

## Examples:

$\frac{2}{3}$	two thirds	$\frac{1}{2}$	one half
$\frac{3}{4}$	three fourths	$\frac{5}{7}$	five sevenths
$\frac{3}{5}$	three fifths	$\frac{4}{9}$	four ninths
$\frac{7}{10}$	seven tenths	$\frac{1}{4}$	one fourth ( quarter )
$\frac{5}{8}$	five eighths	$\frac{6}{6}$	six sixths

## Main objectives:

- How to write and read the fraction.

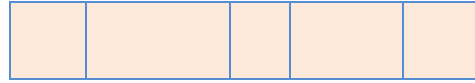
## Exercises: Fractions

### 1 Circle equal or not equal:



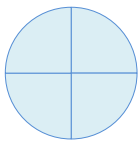
Equal

Not equal



Equal

Not equal



Equal

Not equal



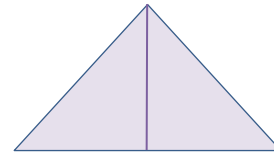
Equal

Not equal



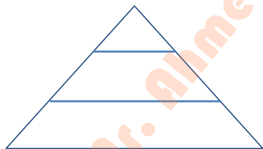
Equal

Not equal



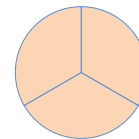
Equal

Not equal



Equal

Not equal



Equal

Not equal



Equal

Not equal

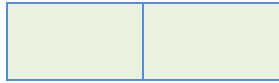


Equal

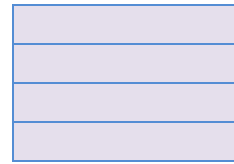
Not equal

- Distinguish equal and not equal parts.

**2** How many equal parts?



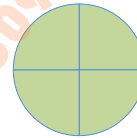
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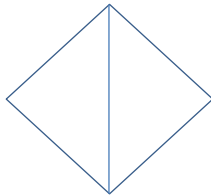
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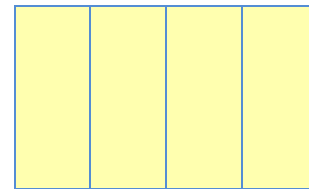
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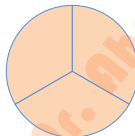
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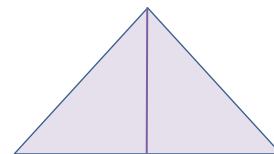
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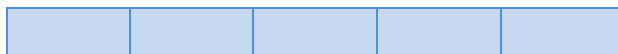
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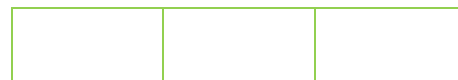
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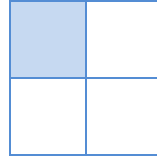
**Main objectives:**

- Write how many equal parts.

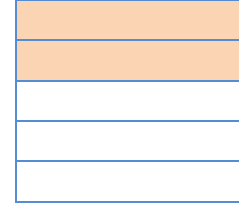
3 Write the fraction of each colored part:



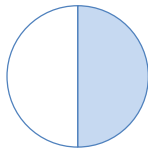
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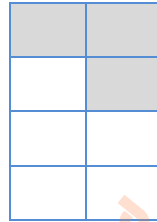
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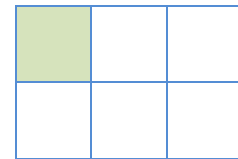
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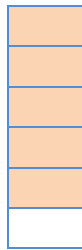
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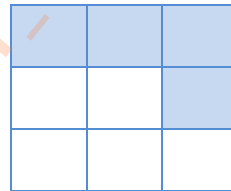
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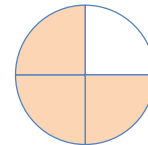
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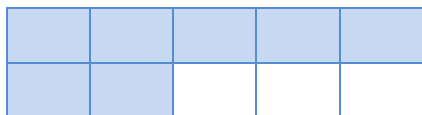
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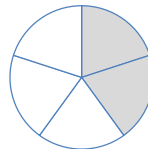
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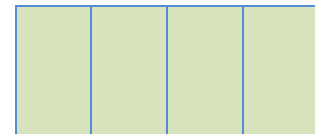
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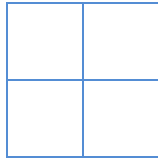


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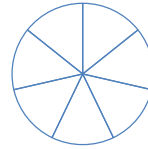
4 Color to represent the fraction:



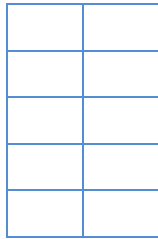
$$\frac{1}{4}$$



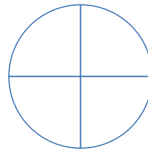
$$\frac{1}{2}$$



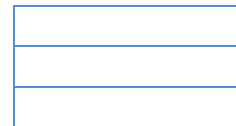
$$\frac{2}{7}$$



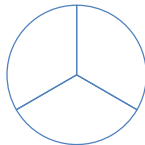
$$\frac{3}{10}$$



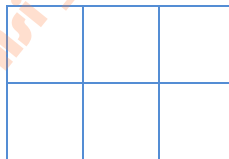
$$\frac{3}{4}$$



$$\frac{1}{3}$$



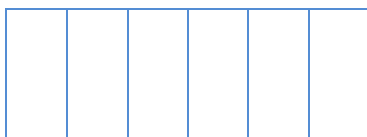
$$\frac{2}{3}$$



$$\frac{5}{6}$$



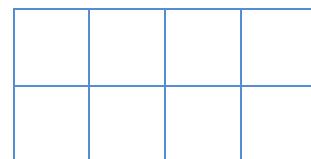
$$\frac{3}{3}$$



$$\frac{1}{6}$$



$$\frac{3}{5}$$

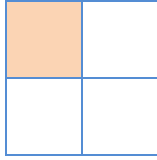


$$\frac{5}{8}$$

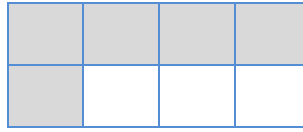
Main objectives:

- Represent the fraction.

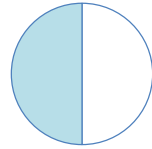
5 Write the name of each fraction:



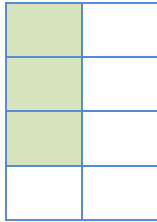
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



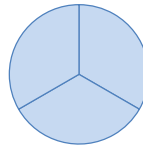
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



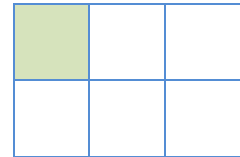
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



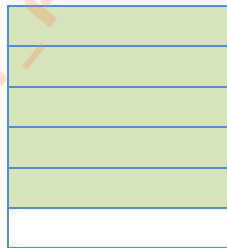
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



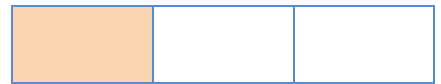
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



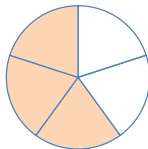
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



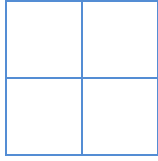
$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



$\frac{\dots}{\dots} = \frac{\dots}{\dots}$



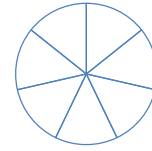
**4** Color to represent the fraction:



Three fourths



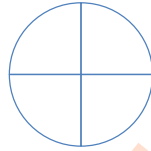
One half



Five sevenths



Four tenths



Four fourths



Two thirds



third



Two sixths



One fifth



Three sixths



Two fifths



Seven eighths

**Main objectives:**

- Represent the fractions.

**6 Complete:**

Fraction	Writing fraction	Name of fraction
Numerator is 1, Denominator is 3	$\frac{\quad}{\quad}$	.....
Numerator is 1, Denominator is 2	$\frac{\quad}{\quad}$	.....
Numerator is 2, Denominator is 5	$\frac{\quad}{\quad}$	.....
Numerator is 3, Denominator is 4	$\frac{\quad}{\quad}$	.....
Numerator is 2, Denominator is 3	$\frac{\quad}{\quad}$	.....
Numerator is 1, Denominator is 4	$\frac{\quad}{\quad}$	.....
Numerator is 5, Denominator is 7	$\frac{\quad}{\quad}$	.....
Numerator is 3, Denominator is 3	$\frac{\quad}{\quad}$	.....
Numerator is 3, Denominator is 8	$\frac{\quad}{\quad}$	.....
Numerator is 1, Denominator is 6	$\frac{\quad}{\quad}$	.....
Numerator is 2, Denominator is 7	$\frac{\quad}{\quad}$	.....
Numerator is 4, Denominator is 9	$\frac{\quad}{\quad}$	.....

## Lesson 2

## Unit fraction



### Unit fraction

- Unit fraction is a fraction with a numerator of 1.

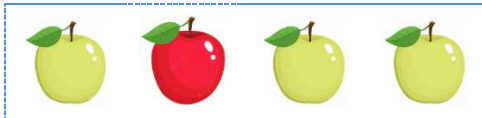
Ex:  $\frac{1}{3}$ ,  $\frac{1}{5}$ ,  $\frac{1}{2}$ ,  $\frac{1}{7}$



### Unit fraction of a set

- Its represent one of equal parts of a set.

Ex: fraction of the red apples.

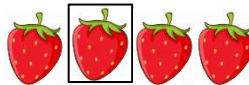


Fraction of the red apples is  $\frac{1}{4}$

### 1 Write the fraction:



.....  
\_\_\_\_\_  
.....



.....  
\_\_\_\_\_  
.....



.....  
\_\_\_\_\_  
.....



.....  
\_\_\_\_\_  
.....



.....  
\_\_\_\_\_  
.....



.....  
\_\_\_\_\_  
.....

### Main objectives:

- Identify the unit fraction.

## Unit fractions



### Unit fraction of a number

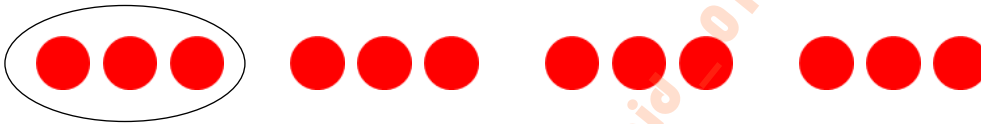
- To find a unit fraction of a number, we can divide the number by the denominator.

**EX:** Find  $\frac{1}{3}$  of 6



$$\frac{1}{3} \text{ of } 6 = 2$$

**EX:** Find  $\frac{1}{4}$  of 12



$$\frac{1}{4} \text{ of } 12 = 3$$

### 1 Use the counters to find the result:

$$\frac{1}{3} \text{ of } 12 = \dots\dots\dots$$



$$\frac{1}{5} \text{ of } 10 = \dots\dots\dots$$



$$\frac{1}{2} \text{ of } 8 = \dots\dots\dots$$



$$\frac{1}{3} \text{ of } 15 = \dots\dots\dots$$



$$\frac{1}{4} \text{ of } 12 = \dots\dots\dots$$



- Find a unit fraction of a number.

## Exercises: Unit fraction

### 2 Find the result:

$\frac{1}{3} \text{ of } 21 = \dots\dots\dots$

$\frac{1}{5} \text{ of } 50 = \dots\dots\dots$

$\frac{1}{7} \text{ of } 35 = \dots\dots\dots$

$\frac{1}{3} \text{ of } 27 = \dots\dots\dots$

$\frac{1}{2} \text{ of } 18 = \dots\dots\dots$

$\frac{1}{6} \text{ of } 12 = \dots\dots\dots$

$\frac{1}{2} \text{ of } 10 = \dots\dots\dots$

$\frac{1}{8} \text{ of } 16 = \dots\dots\dots$

$\frac{1}{7} \text{ of } 14 = \dots\dots\dots$

$\frac{1}{3} \text{ of } 18 = \dots\dots\dots$

$\frac{1}{4} \text{ of } 8 = \dots\dots\dots$

$\frac{1}{4} \text{ of } 36 = \dots\dots\dots$

$\frac{1}{8} \text{ of } 24 = \dots\dots\dots$

$\frac{1}{5} \text{ of } 15 = \dots\dots\dots$

$\frac{1}{7} \text{ of } 7 = \dots\dots\dots$

$\frac{1}{9} \text{ of } 45 = \dots\dots\dots$

$\frac{1}{4} \text{ of } 20 = \dots\dots\dots$

$\frac{1}{6} \text{ of } 36 = \dots\dots\dots$

$\frac{1}{5} \text{ of } 30 = \dots\dots\dots$

$\frac{1}{2} \text{ of } 6 = \dots\dots\dots$

### 3 Compare by using $<$ , $>$ , $=$

$\frac{1}{6} \text{ of } 18 \quad \square \quad \frac{1}{4} \text{ of } 24$

$\frac{1}{7} \text{ of } 28 \quad \square \quad \frac{1}{3} \text{ of } 9$

$\frac{1}{4} \text{ of } 12 \quad \square \quad \frac{1}{2} \text{ of } 8$

$\frac{1}{8} \text{ of } 56 \quad \square \quad \frac{1}{6} \text{ of } 42$

$\frac{1}{8} \text{ of } 8 \quad \square \quad \frac{1}{3} \text{ of } 15$

$\frac{1}{4} \text{ of } 8 \quad \square \quad \frac{1}{4} \text{ of } 20$

$\frac{1}{4} \text{ of } 36 \quad \square \quad \frac{1}{3} \text{ of } 27$

$\frac{1}{6} \text{ of } 30 \quad \square \quad \frac{1}{2} \text{ of } 12$

$\frac{1}{6} \text{ of } 60 \quad \square \quad \frac{1}{5} \text{ of } 25$

$\frac{1}{9} \text{ of } 9 \quad \square \quad \frac{1}{5} \text{ of } 40$


### Main objectives:


- Find unit fraction of a number.

# Unit fraction



## Unit fraction of a measurement units

1 day = 24 hours	
	
$\frac{1}{4}$ of 24 = 6	$\frac{1}{2}$ of 24 = 12
quarter of day = 6	half of day = 12

1 hour = 60 minutes	
	
$\frac{1}{4}$ hr = 15	$\frac{1}{2}$ hr = 30
$\frac{3}{4}$ hr = 45	1 hr = 60
$\frac{1}{4}$ of 60 = 15	$\frac{1}{2}$ of 60 = 30
quarter of hour = 15	half of hour = 30

## 2 Complete:

- $\frac{1}{2}$  of a day = ..... hours
- Fourth of a day is ..... hours
- $\frac{1}{3}$  of a day = ..... hours
- $\frac{1}{6}$  of a day = ..... hours
- $\frac{1}{4}$  of a day = ..... hours
- One hour = ..... minutes
- half of an hour is ..... minutes
- $\frac{1}{4}$  of an hour = ..... minutes



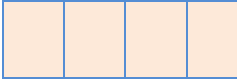

## Lesson 3

## Properties of fraction

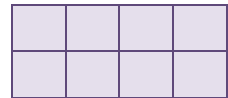
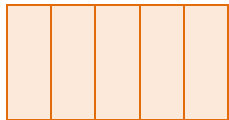


### Write one whole as a fraction

- If the numerator equals the denominator the result is equal one whole.

			
$\frac{1}{3}$	$\frac{3}{3} = 1$	$\frac{4}{4} = 1$	$\frac{5}{5} = 1$

### 1 Join:



$$\frac{3}{3}$$

$$\frac{4}{4}$$

$$\frac{5}{5}$$

$$\frac{8}{8}$$

$$\frac{2}{2}$$

### 2 Complete:

$$1 = \frac{3}{\dots\dots\dots}$$

$$1 = \frac{\dots\dots\dots}{9}$$

$$1 = \frac{\dots\dots\dots}{6}$$

$$1 = \frac{17}{\dots\dots\dots}$$

$$1 = \frac{\dots\dots\dots}{13}$$

$$1 = \frac{20}{\dots\dots\dots}$$

$$1 = \frac{\dots\dots\dots}{8}$$

$$1 = \frac{15}{\dots\dots\dots}$$

$$1 = \frac{\dots\dots\dots}{10}$$

$$1 = \frac{\dots\dots\dots}{7}$$

$$1 = \frac{\dots\dots\dots}{2}$$

$$1 = \frac{5}{\dots\dots\dots}$$

$$1 = \frac{6}{\dots\dots\dots} = \frac{4}{\dots\dots\dots} = \frac{\dots\dots\dots}{8} = \frac{\dots\dots\dots}{7} = \frac{11}{\dots\dots\dots}$$

$$1 = \frac{\dots\dots\dots}{9} = \frac{2}{\dots\dots\dots} = \frac{\dots\dots\dots}{12} = \frac{25}{\dots\dots\dots} = \frac{18}{\dots\dots\dots}$$

### Main objectives:

- Identify how to write one whole as a fraction.



## Write whole number as a fraction

- We can write any whole number as a fraction with denominator of 1.

**EX:**  $3 = \frac{3}{1}$  ,  $5 = \frac{5}{1}$  ,  $8 = \frac{8}{1}$  ,  $12 = \frac{12}{1}$

### 1 Complete:

$$7 = \frac{7}{\dots\dots}$$

$$8 = \frac{\dots\dots}{1}$$

$$\dots\dots = \frac{12}{1}$$

$$2 = \frac{2}{\dots\dots}$$

$$\dots\dots = \frac{5}{1}$$

$$10 = \frac{10}{\dots\dots}$$

$$20 = \frac{\dots\dots}{1}$$

$$14 = \frac{14}{\dots\dots}$$

$$9 = \frac{9}{\dots\dots}$$

$$17 = \frac{17}{\dots\dots}$$

$$18 = \frac{\dots\dots}{1}$$

$$\dots\dots = \frac{11}{1}$$



## A fraction with a numerator of zero

- If the numerator of the fraction is 0, the fraction equals 0.

**EX:**  $\frac{0}{6} = 0$  ,  $\frac{0}{1} = 0$  ,  $\frac{0}{9} = 0$  ,  $\frac{0}{15} = 0$

### 1 Complete:

$$\frac{0}{4} = \dots\dots$$

$$\frac{0}{6} = \dots\dots$$

$$\frac{\dots\dots}{15} = 0$$

$$\frac{0}{8} = \dots\dots$$

$$\frac{\dots\dots}{9} = 0$$

$$\frac{0}{1} = \dots\dots$$

$$\frac{0}{12} = \dots\dots$$

$$\frac{\dots\dots}{16} = 0$$

$$\frac{0}{3} = \dots\dots$$

$$\frac{\dots\dots}{7} = 0$$

$$\frac{0}{10} = \dots\dots$$

$$\frac{\dots\dots}{13} = 0$$

- Use properties of fractions to solve problems.

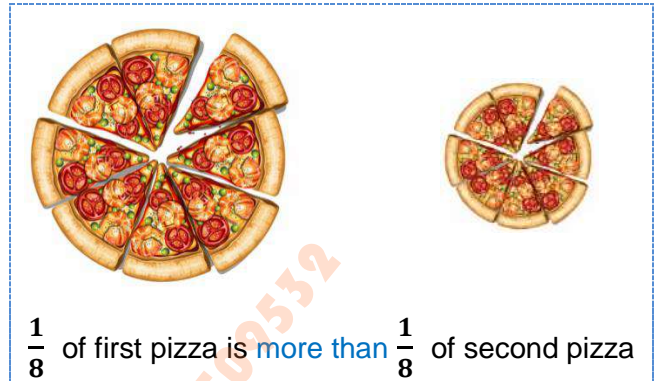
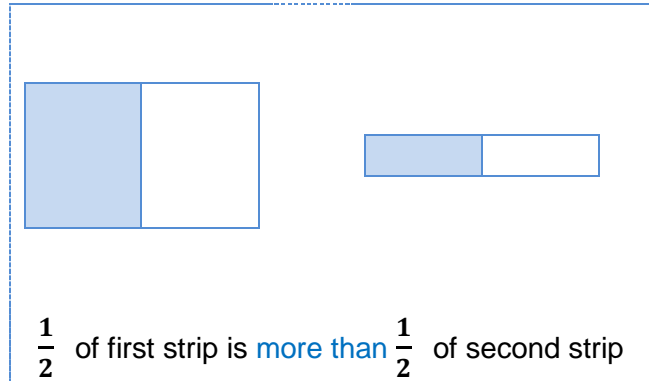


## Properties of fractions

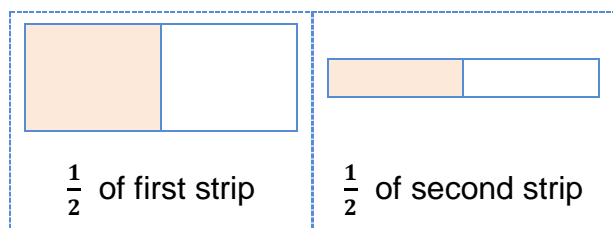
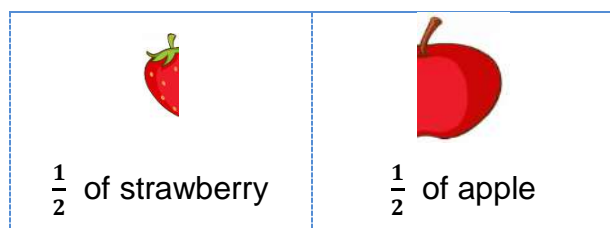
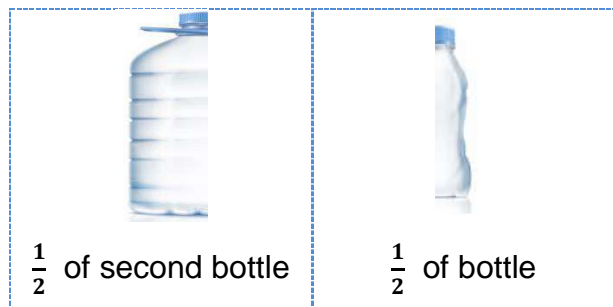
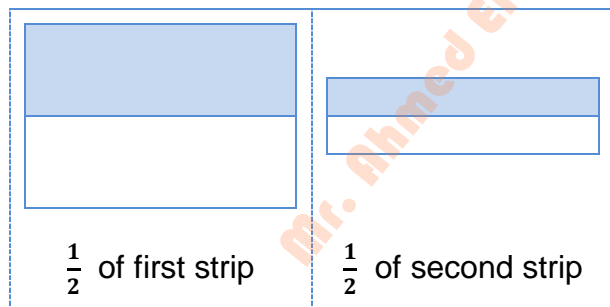
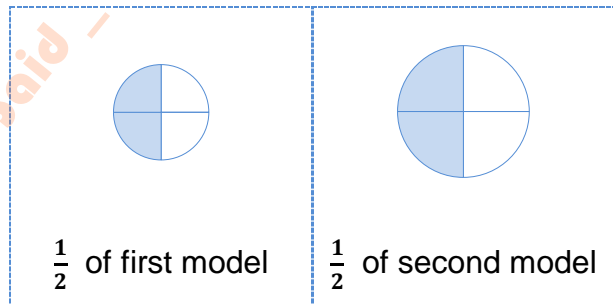
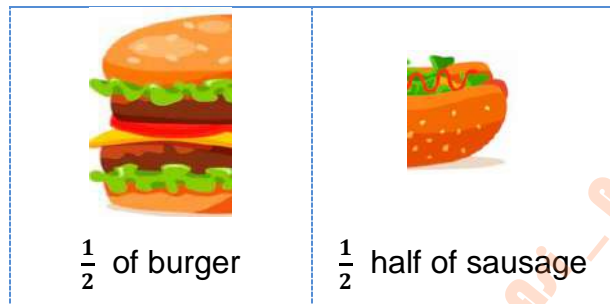


### Same fractions of different size wholes

- The quantity represented by a fraction depends on the size of the whole.



### 1 Circle Which is more



### Main objectives:

- Identify that the fraction depends on the size of the whole.



## Fractions story problems

EX:

Yara had a bar of candy. She divided it into 5 equal parts, and ate One of them.  
**What fraction of the Candy did she eat?**

Solve:



The fraction of Candy she ate =  $\frac{1}{5}$

## 1 Answer the following:

- a) Omar has a bar of chocolate. He divides it into 4 parts.  
**What is the fraction that represents each part?**

.....  
 .....

- b) Khaled studies for  $\frac{1}{8}$  of a day.  
**How many hours does he study?**

.....  
 .....

- c) Saly needs to cut a piece of paper into equal pieces to share it between her and 4 of her friends.  
**What is the fraction that represents the share of each one?**

.....  
 .....

- d) Samy has 2 red marbles and 5 green marbles.  
**What is the fraction that represents the red marbles?**

.....  
 .....

1 Choose:

a) Which fraction represents the colored part



$$\frac{1}{3}$$

$$\frac{1}{4}$$

$$\frac{1}{5}$$

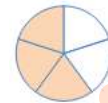
b) One whole has ..... Sevenths.

5

6

7

c) The fraction that represents colored parts  
three fourths                      three fifths



two thirds

d)  $1 = \dots\dots\dots$

$$\frac{1}{3}$$

$$\frac{2}{3}$$

$$\frac{3}{3}$$

e)  $\frac{1}{5}$  of 25 = .....

3

4

5

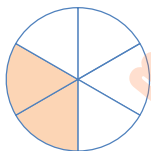
f)  $\frac{1}{4}$  of a day = .....

6

12

18

2 Complete:



$$\frac{\dots\dots\dots}{\dots\dots\dots} = \dots\dots\dots$$



$$\frac{\dots\dots\dots}{\dots\dots\dots} = \dots\dots\dots$$



$$\frac{\dots\dots\dots}{\dots\dots\dots} = \dots\dots\dots$$

Nader has 10 flowers. He gave his sister fifth of them.

**How many flowers with her sister?**

.....  
.....

# ELIAS

## Chapter 3

- Lesson 1**      *Ways to represent fractions*
- Lesson 2**      *Comparing proper fractions*
- Lesson 3**      *Ordering fractions on number line*
- Lesson 4**      *Adding and subtracting fractions with common denominator*
- Lesson 5**      *Fractions story problems*



# Lesson 1

## Ways to represent fractions



### Ways to represent fraction

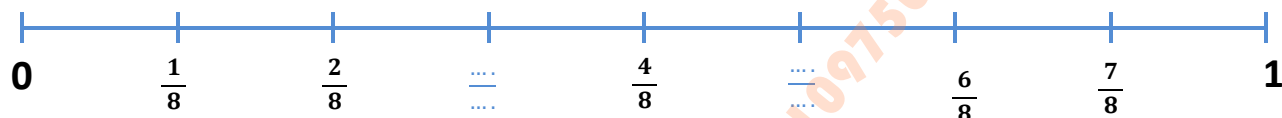
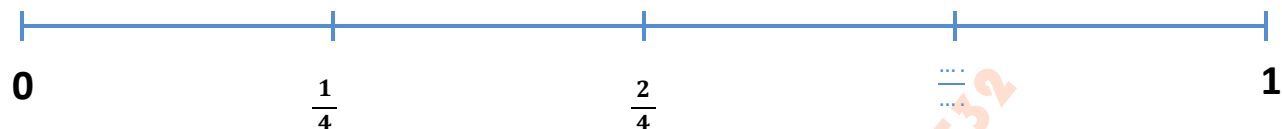
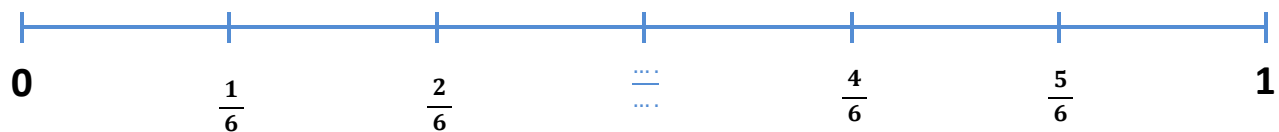
Fraction	Number line	Strips	Model
1			
$\frac{1}{2}$			
$\frac{1}{3}$			
$\frac{1}{4}$			
$\frac{1}{5}$			

### Main objectives:

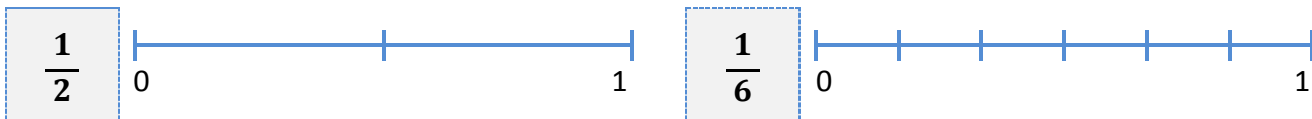
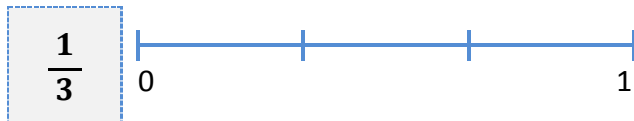
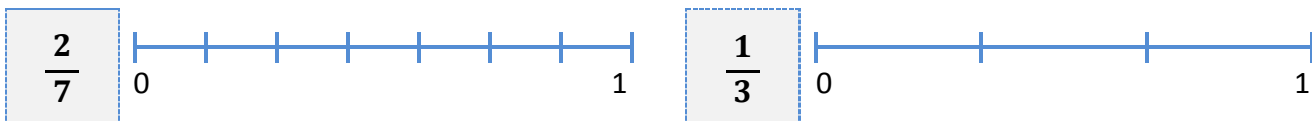
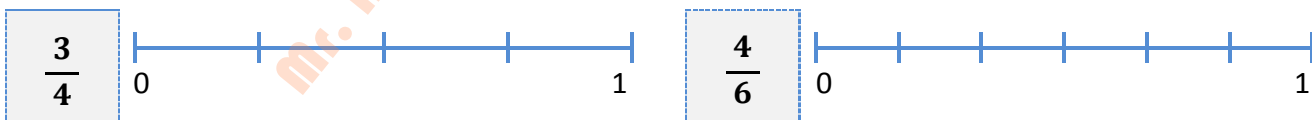
- Identify ways to represent fractions.

## Exercises: Ways to represent fractions

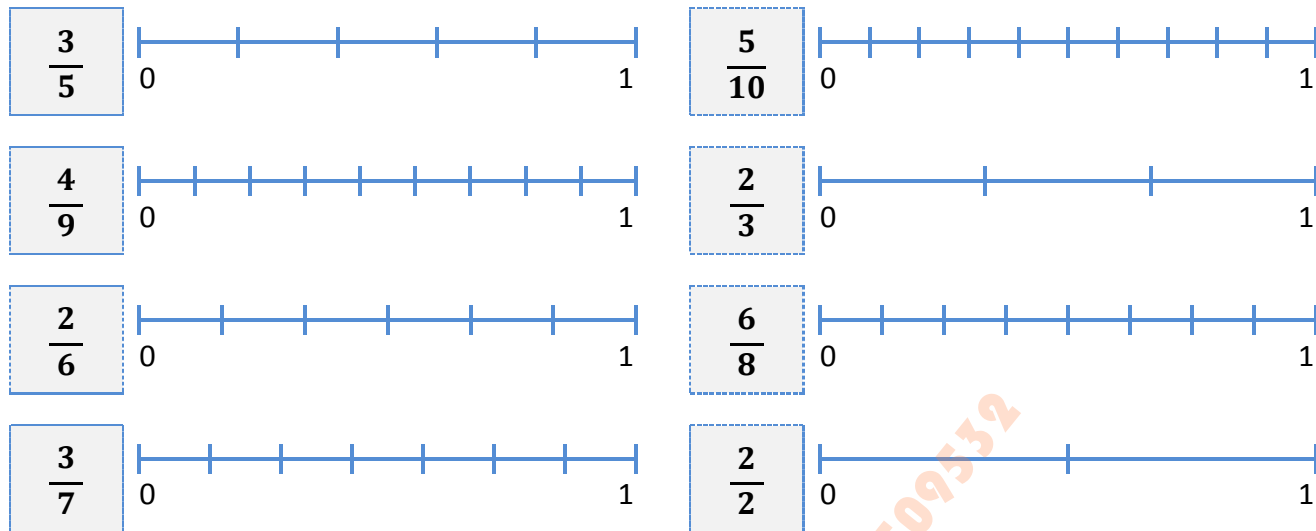
### 1 Complete:



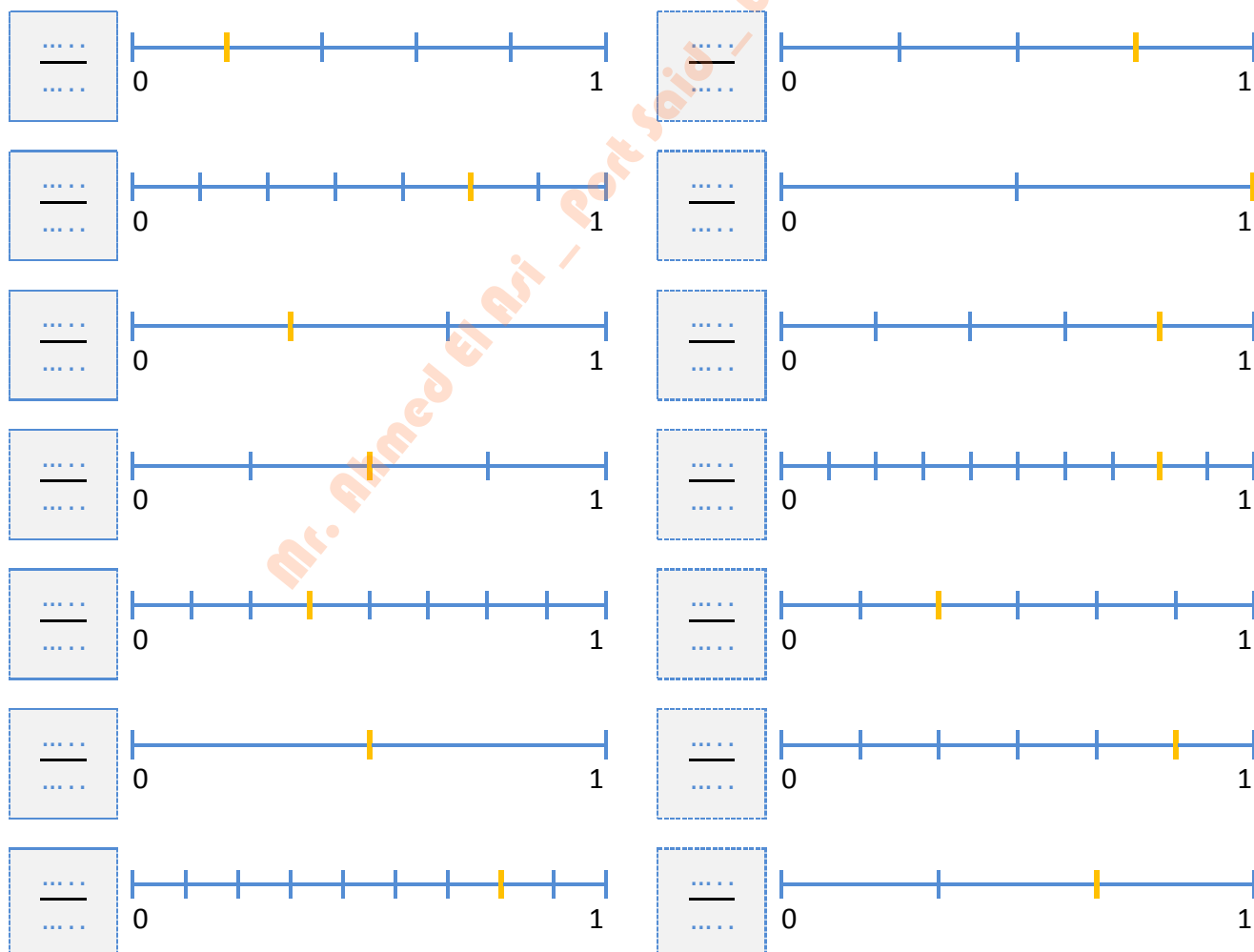
### 2 Locate each fraction on the number line:



## Exercises: Ways to represent fractions



### 6 Write the fraction which represent on number line:



### Main objectives:

- Locate the fraction on the number line.



## Proper fraction

- A **proper fraction** is a fraction its numerator is less than its denominator.

**EX:**  $\frac{1}{3}$  ,  $\frac{1}{2}$  ,  $\frac{2}{5}$  ,  $\frac{3}{8}$  ,  $\frac{1}{7}$  ,  $\frac{6}{9}$



## Comparing Proper fraction with same denominators:

- When we comparing fractions with **same denominators**, the fraction with the greater numerators is the greater.

**EX:**  $\frac{3}{4} > \frac{1}{4}$

Number line	strips	Models
$\frac{3}{4}$ 	$\frac{3}{4}$ 	
$\frac{1}{4}$ 	$\frac{1}{4}$ 	

$\frac{3}{4} > \frac{1}{4} \Rightarrow \frac{3}{4}$  is greater because the fractions have the **same denominators** and  $3 > 1$



## Comparing Proper fraction with same numerators:

- When we comparing fractions with **same numerators**, the fraction with the greater denominators is the smaller.

**EX:**  $\frac{2}{5} < \frac{2}{3}$

Number line	strips	Models
$\frac{2}{5}$ 	$\frac{2}{5}$ 	
$\frac{2}{3}$ 	$\frac{2}{3}$ 	

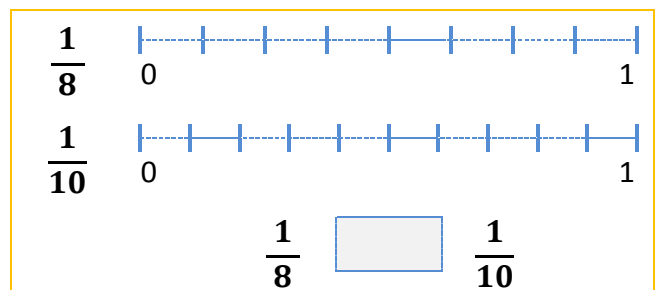
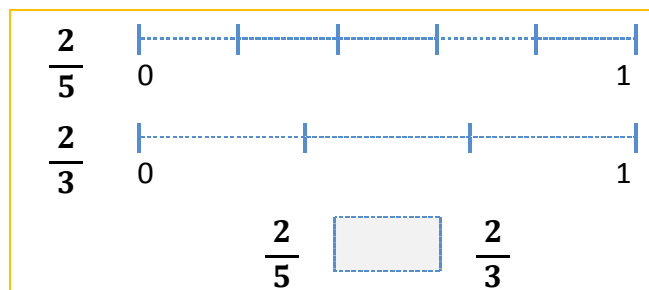
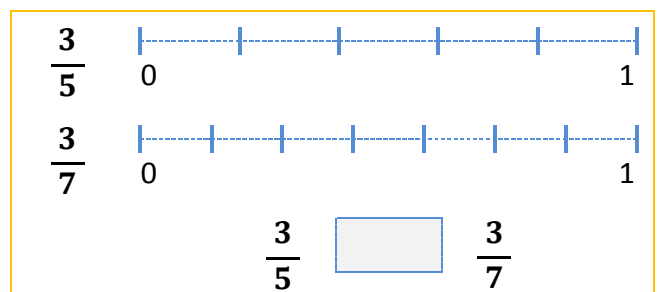
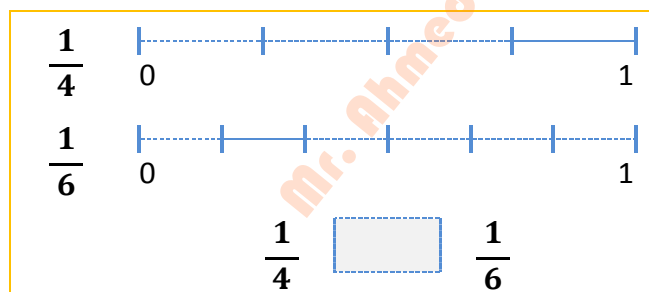
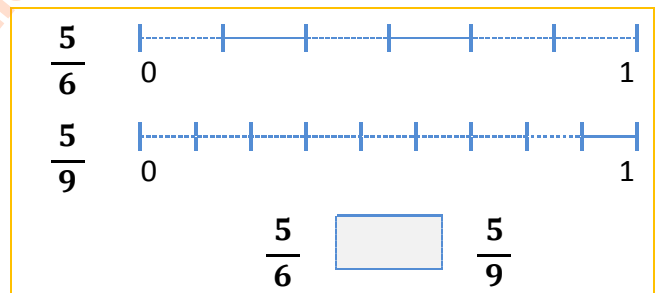
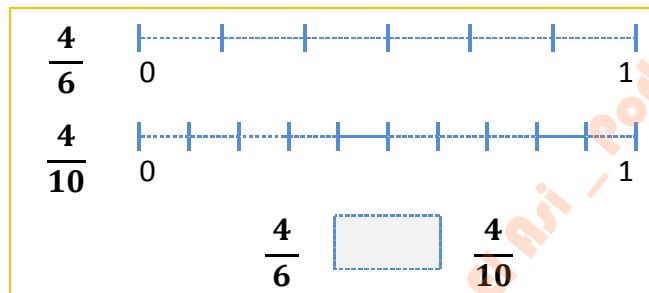
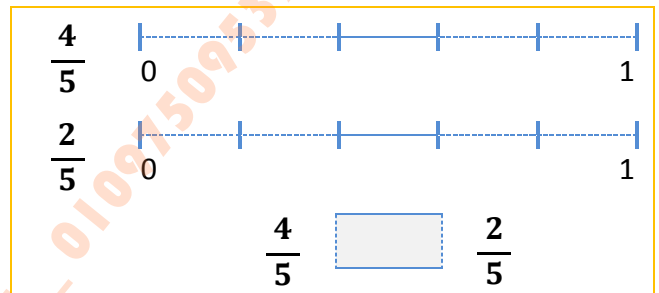
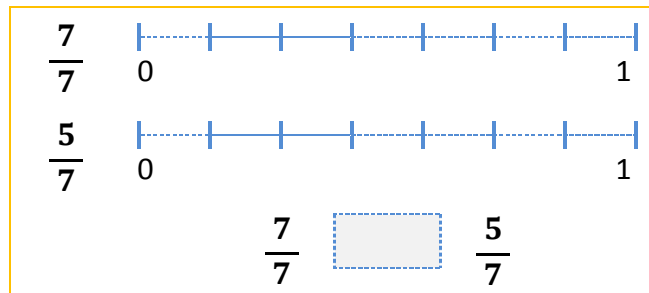
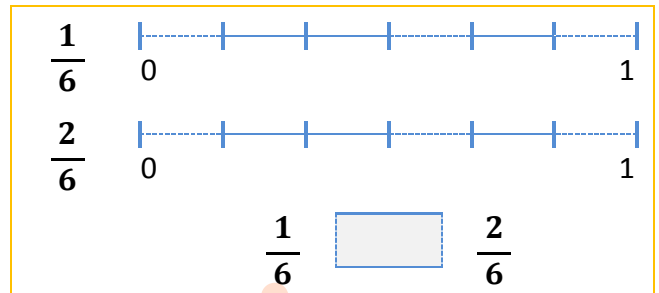
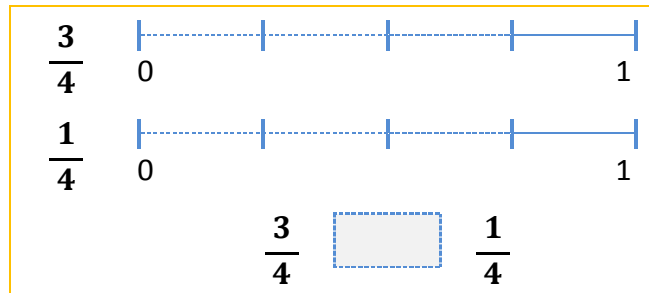
$\frac{2}{5} < \frac{2}{3} \Rightarrow \frac{2}{3}$  is greater because the fractions have the **same numerators** and  $3 < 5$

- Identify how to compare proper fractions.



## Exercises: Comparing fractions

1 Use the number line to compare by using  $>$ ,  $<$ ,  $=$








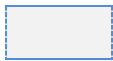
### Main objectives:



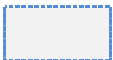
- Use number line to compare fractions.



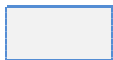
## Exercises: Comparing fractions



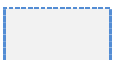
### 2 Use the strips to compare by using $>$ , $<$ , $=$



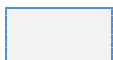
$\frac{2}{5}$    
 $\frac{3}{5}$    
 $\frac{2}{5}$    $\frac{3}{5}$



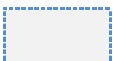
$\frac{4}{7}$    
 $\frac{3}{7}$    
 $\frac{4}{7}$    $\frac{3}{7}$



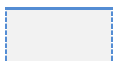
$\frac{2}{3}$    
 $\frac{1}{3}$    
 $\frac{2}{3}$    $\frac{1}{3}$



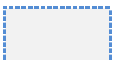
$\frac{2}{6}$    
 $\frac{5}{6}$    
 $\frac{3}{6}$    $\frac{5}{6}$



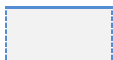
$\frac{3}{7}$    
 $\frac{3}{5}$    
 $\frac{3}{7}$    $\frac{3}{5}$

$\frac{5}{6}$    
 $\frac{5}{10}$    
 $\frac{5}{6}$    $\frac{5}{10}$

$\frac{1}{3}$    
 $\frac{1}{4}$    
 $\frac{1}{3}$    $\frac{1}{4}$

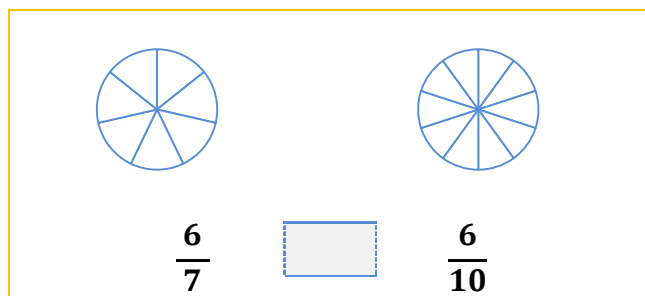
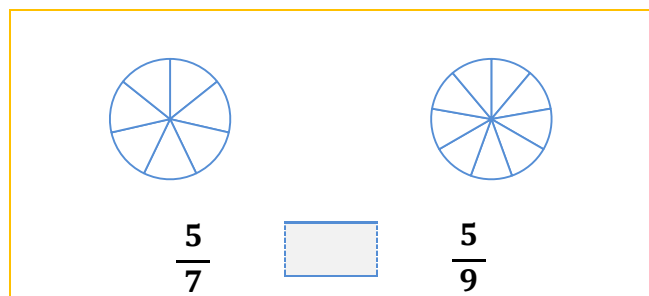
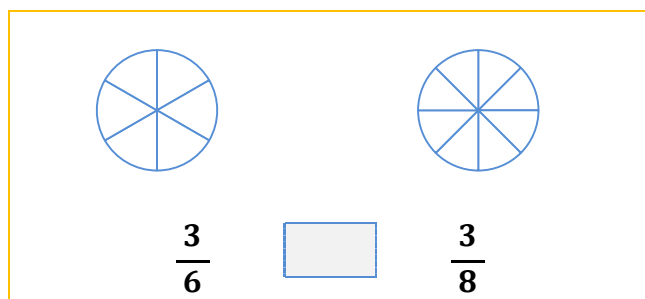
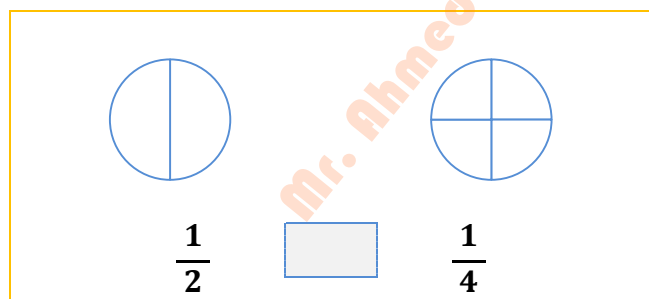
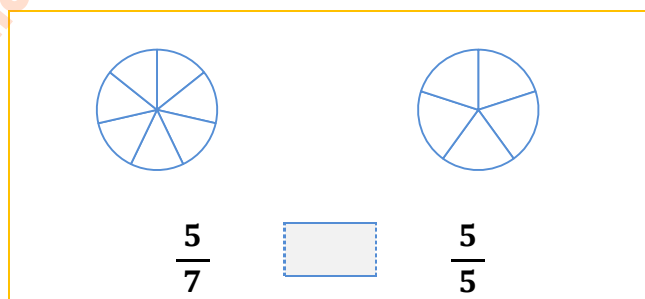
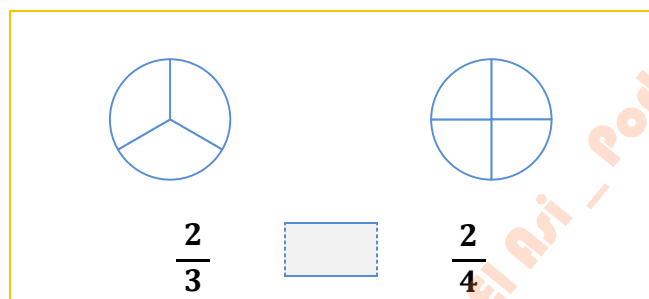
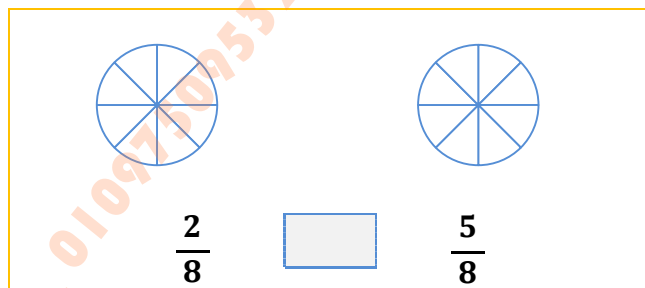
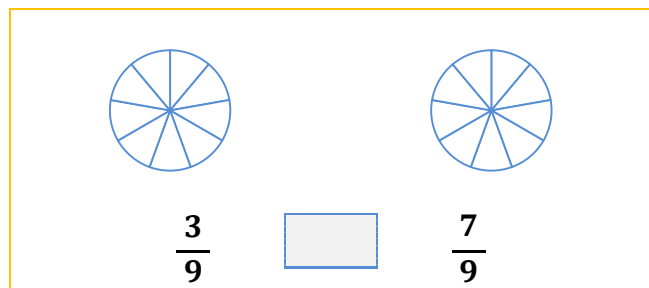
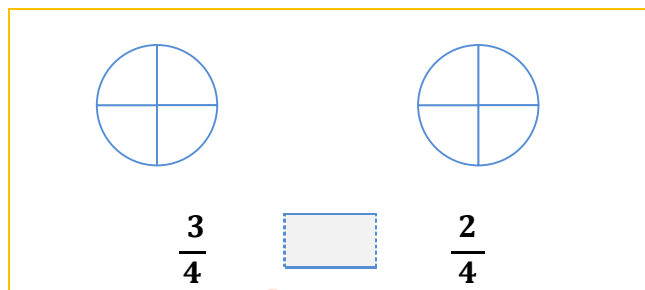
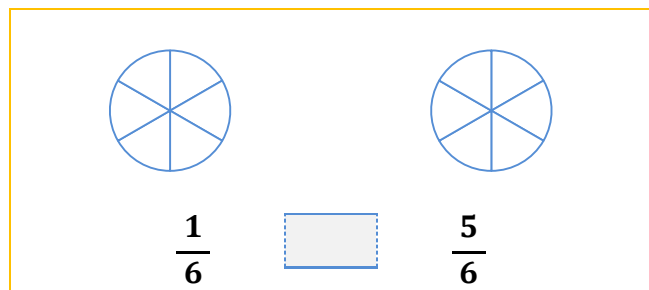
$\frac{3}{4}$    
 $\frac{3}{8}$    
 $\frac{3}{4}$    $\frac{3}{8}$

$\frac{7}{9}$    
 $\frac{7}{7}$    
 $\frac{7}{9}$    $\frac{7}{7}$

$\frac{1}{3}$    
 $\frac{1}{2}$    
 $\frac{1}{3}$    $\frac{1}{2}$

## Exercises: Comparing fractions

### 3 Use the models to compare by using $>$ , $<$ , $=$



#### Main objectives:

- Use models to compare fractions.

## Exercises: Comparing fractions

### 4 compare by using $>$ , $<$ , $=$

$\frac{3}{6}$ <input type="text"/> $\frac{1}{6}$	$\frac{4}{5}$ <input type="text"/> $\frac{2}{5}$	$\frac{3}{7}$ <input type="text"/> $\frac{4}{7}$
$\frac{2}{4}$ <input type="text"/> $\frac{3}{4}$	$\frac{2}{3}$ <input type="text"/> $1$	$\frac{9}{10}$ <input type="text"/> $\frac{5}{10}$
$\frac{5}{7}$ <input type="text"/> $\frac{1}{7}$	$\frac{4}{8}$ <input type="text"/> $\frac{2}{8}$	$1$ <input type="text"/> $\frac{2}{2}$
$\frac{1}{2}$ <input type="text"/> $\frac{2}{2}$	$\frac{1}{4}$ <input type="text"/> $\frac{2}{4}$	$\frac{3}{9}$ <input type="text"/> $\frac{6}{9}$
$\frac{2}{5}$ <input type="text"/> $\frac{4}{5}$	$\frac{2}{6}$ <input type="text"/> $\frac{4}{6}$	$\frac{3}{3}$ <input type="text"/> $1$
$\frac{8}{10}$ <input type="text"/> $\frac{6}{10}$	$\frac{5}{9}$ <input type="text"/> $\frac{8}{9}$	$\frac{4}{8}$ <input type="text"/> $\frac{7}{8}$

### 5 compare by using $>$ , $<$ , $=$

$\frac{1}{2}$ <input type="text"/> $\frac{1}{4}$	$\frac{10}{15}$ <input type="text"/> $\frac{10}{14}$	$\frac{7}{8}$ <input type="text"/> $\frac{7}{10}$
$\frac{5}{7}$ <input type="text"/> $\frac{5}{9}$	$\frac{2}{3}$ <input type="text"/> $1$	$\frac{3}{4}$ <input type="text"/> $\frac{3}{5}$
$\frac{4}{9}$ <input type="text"/> $\frac{4}{4}$	$1$ <input type="text"/> $\frac{1}{4}$	$\frac{9}{11}$ <input type="text"/> $\frac{9}{10}$
$\frac{8}{9}$ <input type="text"/> $\frac{8}{10}$	$\frac{7}{9}$ <input type="text"/> $\frac{7}{11}$	$\frac{2}{5}$ <input type="text"/> $\frac{2}{6}$
$\frac{10}{13}$ <input type="text"/> $\frac{10}{11}$	$\frac{4}{5}$ <input type="text"/> $\frac{4}{8}$	$\frac{5}{9}$ <input type="text"/> $\frac{5}{6}$
$\frac{1}{3}$ <input type="text"/> $\frac{1}{2}$	$\frac{8}{10}$ <input type="text"/> $\frac{8}{9}$	$\frac{6}{10}$ <input type="text"/> $\frac{6}{12}$



## Ordering fraction with same denominators

- If the fractions have same denominators, we can order them on the number line.

**EX:**

Order the following fractions on the number line in ascending order

$$\frac{4}{7}, \frac{0}{7}, \frac{7}{7}, \frac{2}{7}$$



The order:  $\frac{4}{7}, \frac{0}{7}, \frac{7}{7}, \frac{2}{7}$



## Ordering fraction with different denominators

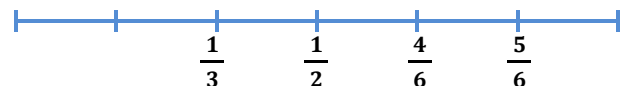
- If the fractions have different denominators, we find a common fraction for all denominators, and then order them on the number line.

**EX:**

Order the following fractions on the number line in ascending order

$$\frac{5}{6}, \frac{1}{3}, \frac{4}{6}, \frac{1}{2}$$

$$\frac{5}{6}, \frac{2}{6}, \frac{4}{6}, \frac{3}{6}$$



The order:  $\frac{1}{3}, \frac{1}{2}, \frac{4}{6}, \frac{5}{6}$

**1**

Put the following fractions on the number line then order them in ascending order:

$$\frac{1}{5}, \frac{5}{5}, \frac{3}{5}, \frac{0}{5}$$



The order: ..... , ..... , ..... , .....

## Main objectives:

- Order fractions on the number line.

## Exercises: Ordering fractions on the number line

$$\frac{3}{4}, \frac{7}{8}, \frac{5}{8}, \frac{1}{4}$$



The order: ..... , ..... , ..... , .....

$$\frac{1}{5}, \frac{6}{10}, \frac{2}{5}, \frac{4}{5}$$



The order: ..... , ..... , ..... , .....

$$\frac{1}{3}, \frac{0}{2}, \frac{4}{6}, \frac{3}{6}$$



The order: ..... , ..... , ..... , .....

$$\frac{1}{5}, \frac{3}{10}, \frac{5}{10}, \frac{4}{4}$$



The order: ..... , ..... , ..... , .....

$$\frac{3}{5}, \frac{6}{6}, \frac{1}{10}, \frac{1}{2}$$



The order: ..... , ..... , ..... , .....

$$\frac{1}{3}, \frac{2}{3}, \frac{5}{6}, \frac{1}{2}$$



The order: ..... , ..... , ..... , .....

$$\frac{3}{4}, \frac{2}{4}, \frac{0}{4}, \frac{4}{4}$$



The order: ..... , ..... , ..... , .....

- Order fractions on the number line.

## Lesson 4

### Adding and subtracting fractions with common denominator



#### Adding fractions with same denominator

- To **add** fractions with same denominator, add the numerators and then write the sum over the same denominator.

**EX:**  $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$

Number line	strips	Models
$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$	$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$	$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$



#### Subtracting fractions with same denominator

- To **subtract** fractions with same denominator, subtract the numerators and then write the difference over the same denominator.

**EX:**  $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$

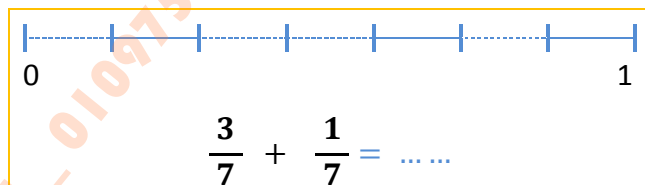
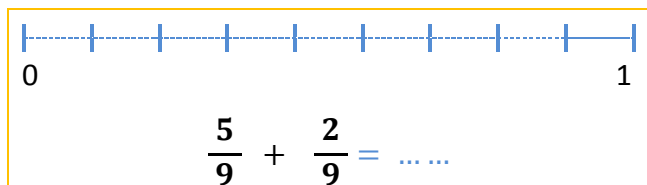
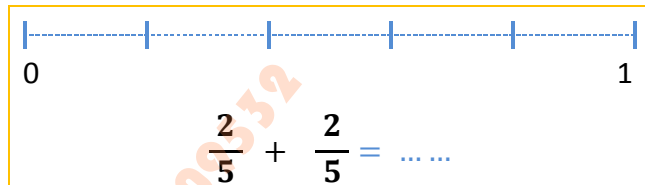
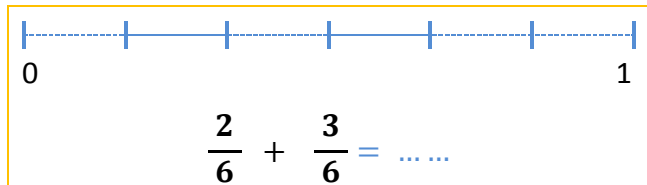
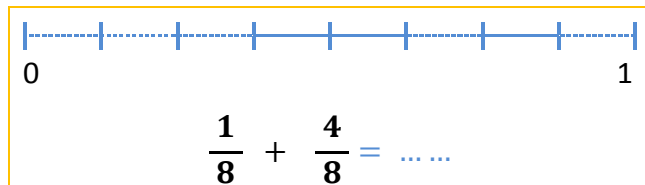
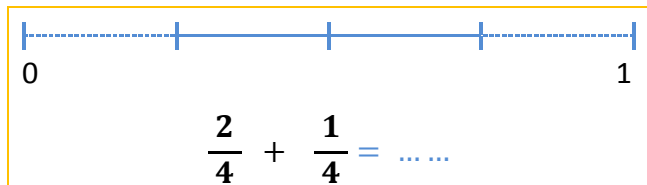
Number line	strips	Models
$\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$	$\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$	$\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$

#### Main objectives:

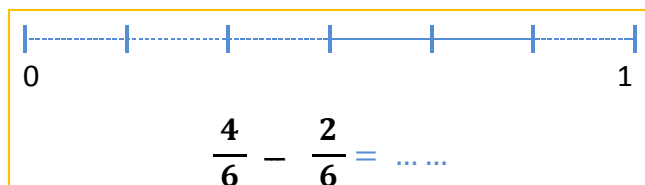
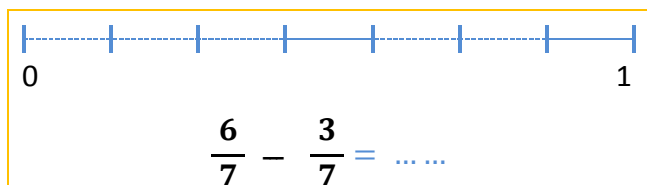
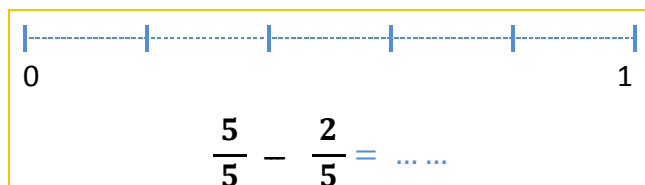
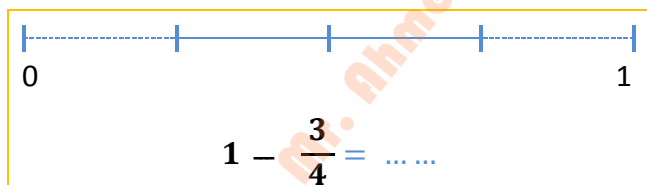
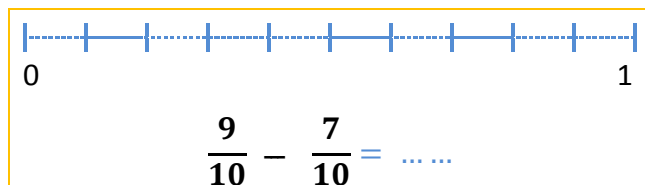
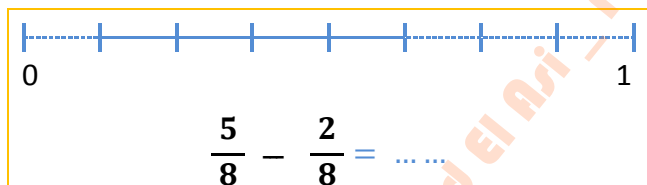
- Identify how to add or subtract fractions with common denominator.

## Exercises: Adding and subtracting fractions

### 1 Use the number line to find the sum:



### 2 Use the number line to find the difference:



- Use the number line to add or subtract fractions.



## Exercises: Adding and subtracting fractions

### 3 Use the strips to find the sum:

--	--	--	--	--	--	--

$$\frac{2}{7} + \frac{1}{7} = \dots\dots\dots$$

--	--	--	--

$$\frac{1}{4} + \frac{2}{4} = \dots\dots\dots$$

--	--	--	--	--	--	--	--	--	--

$$\frac{5}{10} + \frac{4}{10} = \dots\dots\dots$$

--	--	--	--	--	--	--	--	--	--

$$\frac{3}{9} + \frac{5}{9} = \dots\dots\dots$$

--	--	--	--

$$\frac{1}{2} + \frac{1}{2} = \dots\dots\dots$$

--	--	--	--	--	--

$$\frac{1}{6} + \frac{4}{6} = \dots\dots\dots$$

### 4 Use the strips to find the difference:

--	--	--	--	--	--	--	--

$$\frac{6}{8} - \frac{3}{8} = \dots\dots\dots$$

--	--	--	--	--

$$\frac{4}{5} - \frac{2}{5} = \dots\dots\dots$$

--	--	--	--

$$\frac{4}{4} - \frac{2}{4} = \dots\dots\dots$$

--	--	--	--	--	--	--	--	--	--

$$\frac{8}{9} - \frac{2}{9} = \dots\dots\dots$$

--	--	--

$$\frac{2}{3} - \frac{1}{3} = \dots\dots\dots$$

--	--	--	--	--	--	--	--

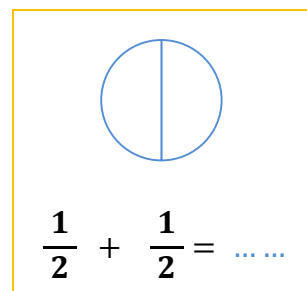
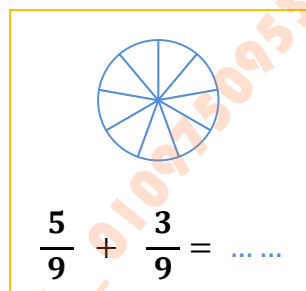
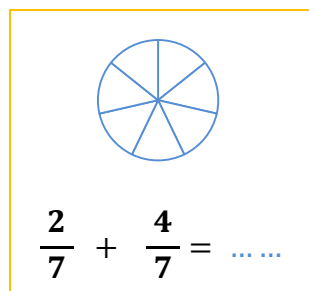
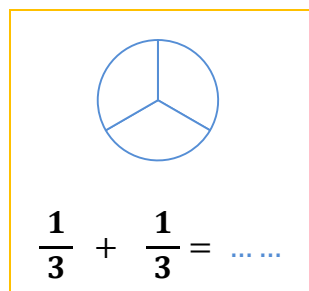
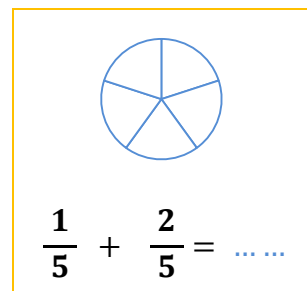
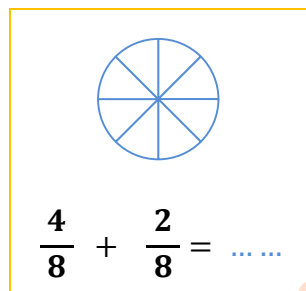
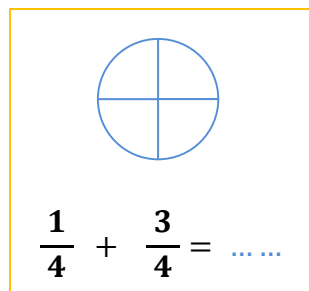
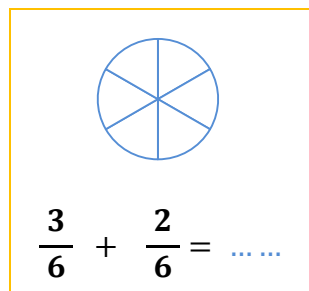
$$\frac{6}{7} - \frac{1}{7} = \dots\dots\dots$$

#### Main objectives:

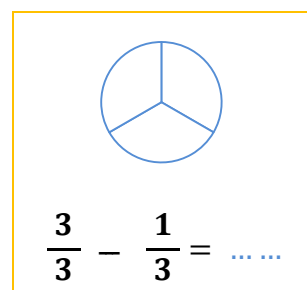
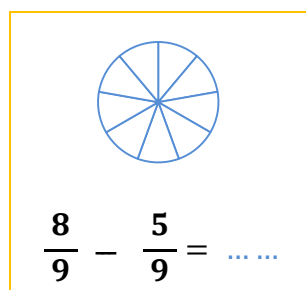
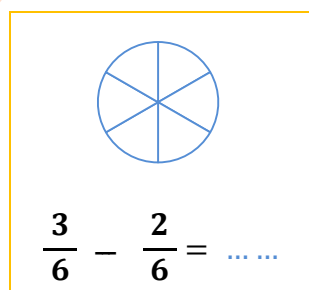
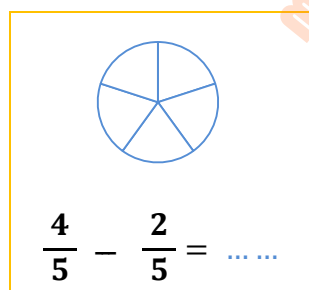
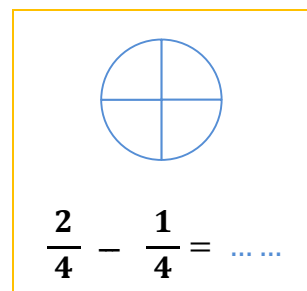
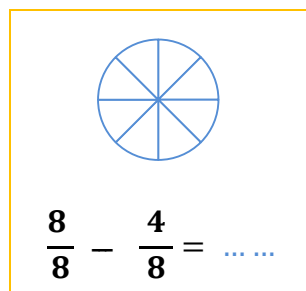
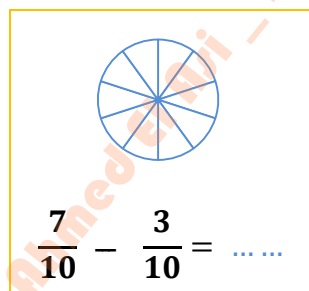
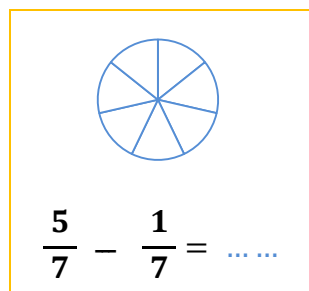
- Use the strips to add and subtract fractions.

**Exercises:** Adding and subtracting fractions

**5** Use the models to find the sum:



**6** Use the models to find the difference:



## Exercises: Adding and subtracting fractions

### 7 Find the sum:

$$\frac{2}{4} + \frac{1}{4} = \dots\dots$$

$$\frac{2}{6} + \frac{3}{6} = \dots\dots$$

$$\frac{4}{10} + \frac{4}{10} = \dots\dots$$

$$\frac{1}{3} + \frac{1}{3} = \dots\dots$$

$$\frac{5}{12} + \frac{4}{12} = \dots\dots$$

$$\frac{2}{5} + \frac{1}{5} = \dots\dots$$

$$\frac{1}{5} + \frac{3}{5} = \dots\dots$$

$$\frac{4}{8} + \frac{1}{8} = \dots\dots$$

$$\frac{3}{9} + \frac{5}{9} = \dots\dots$$

$$\frac{4}{7} + \frac{2}{7} = \dots\dots$$

$$\frac{1}{3} + \frac{2}{3} = \dots\dots$$

$$\frac{1}{4} + \frac{1}{4} = \dots\dots$$

$$\frac{1}{2} + \frac{1}{2} = \dots\dots$$

$$\frac{6}{10} + \frac{3}{10} = \dots\dots$$

$$\frac{2}{6} + \frac{2}{6} = \dots\dots$$

$$\frac{3}{9} + \frac{4}{9} = \dots\dots$$

$$\frac{1}{7} + \frac{6}{7} = \dots\dots$$

$$\frac{5}{8} + \frac{2}{8} = \dots\dots$$

### 8 Find the difference:

$$\frac{3}{5} - \frac{1}{5} = \dots\dots$$

$$\frac{8}{9} - \frac{4}{9} = \dots\dots$$

$$\frac{7}{8} - \frac{5}{8} = \dots\dots$$

$$\frac{7}{9} - \frac{4}{9} = \dots\dots$$

$$\frac{5}{6} - \frac{3}{6} = \dots\dots$$

$$\frac{4}{5} - \frac{2}{5} = \dots\dots$$

$$\frac{6}{7} - \frac{4}{7} = \dots\dots$$

$$\frac{6}{8} - \frac{3}{8} = \dots\dots$$

$$\frac{9}{10} - \frac{3}{10} = \dots\dots$$

$$\frac{8}{10} - \frac{5}{10} = \dots\dots$$

$$\frac{2}{4} - \frac{1}{4} = \dots\dots$$

$$\frac{4}{6} - \frac{1}{6} = \dots\dots$$

$$\frac{9}{12} - \frac{4}{12} = \dots\dots$$

$$\frac{2}{3} - \frac{2}{3} = \dots\dots$$

$$\frac{6}{7} - \frac{5}{7} = \dots\dots$$

$$\frac{3}{4} - \frac{2}{4} = \dots\dots$$

$$\frac{5}{7} - \frac{1}{7} = \dots\dots$$

$$\frac{4}{4} - \frac{2}{4} = \dots\dots$$

### Main objectives:

- Add and subtract fractions.

## Exercises: Adding and subtracting fractions

### 9 compare by using $>$ , $<$ , $=$

$$\frac{1}{6} + \frac{3}{6} \quad \square \quad \frac{3}{6} + \frac{2}{6}$$

$$\frac{3}{8} + \frac{3}{8} \quad \square \quad \frac{7}{8} - \frac{3}{8}$$

$$\frac{4}{9} + \frac{3}{9} \quad \square \quad \frac{5}{9} + \frac{1}{9}$$

$$\frac{1}{4} + \frac{3}{4} \quad \square \quad \frac{2}{4} + \frac{2}{4}$$

$$\frac{3}{7} \quad \square \quad \frac{5}{7} - \frac{3}{7}$$

$$\frac{3}{10} \quad \square \quad \frac{10}{10} + \frac{6}{10}$$

$$\frac{4}{5} - \frac{1}{5} \quad \square \quad \frac{2}{9} + \frac{1}{9}$$

$$\frac{2}{5} + \frac{2}{5} \quad \square \quad \frac{2}{7} + \frac{2}{7}$$

$$\frac{3}{8} + \frac{5}{8} \quad \square \quad 1$$

$$1 \quad \square \quad \frac{2}{4} + \frac{1}{4}$$

$$\frac{3}{5} - \frac{1}{5} \quad \square \quad \frac{5}{7} - \frac{3}{7}$$

$$\frac{7}{12} + \frac{3}{12} \quad \square \quad \frac{9}{12}$$

### 10 Match

$$\frac{5}{7} + \frac{2}{7}$$

$$\frac{3}{9} + \frac{2}{9}$$

$$\frac{8}{9} - \frac{3}{9}$$

$$1$$

$$\frac{2}{4} + \frac{1}{4}$$

$$\frac{1}{4} + \frac{1}{4}$$

$$\frac{3}{9} + \frac{3}{9}$$

$$\frac{6}{9}$$

$$\frac{3}{4} - \frac{1}{4}$$

$$\frac{1}{4} + \frac{2}{4}$$



## Fractions story problems

EX:

Yara had a bar of candy. She ate  $\frac{2}{5}$  in the morning, and ate  $\frac{1}{5}$  of it in afternoon. **What fraction of the candy did she eat?**

Solve:

The fraction of Candy she ate =  $\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$

## 1 Answer the following:

- a) Salma has a bar of chocolate, she ate  $\frac{2}{7}$  of the bar and her brother ate  $\frac{3}{7}$  of the bar.

**What fraction shows what they both did eat?**

.....

.....

- b) Mazen bought a one pizza. He ate  $\frac{3}{8}$  of it.

**what fraction of the pizza is left?**

.....

.....

- c) Sara and Ahmed bought a packet of biscuit. Sara ate  $\frac{1}{4}$  of it. And Ahmed ate  $\frac{1}{2}$  of it.

**who is eat more biscuit?**

.....

.....

- d) Ramy ate  $\frac{2}{6}$  of a pizza in first day. In the second day he ate  $\frac{4}{6}$  of it.

**What day did he eat more?**

.....

.....

## Main objectives:

- Solve fractions story problems.

1 Choose:

a)  $\frac{1}{6}$  .....  $\frac{1}{8}$   
 > < =

b)  $\frac{2}{4}$  < .....  
 $\frac{2}{5}$   $\frac{2}{3}$   $\frac{2}{6}$

c)  $1$  .....  $\frac{7}{7}$   
 > < =

d)  $\frac{1}{5} + \frac{3}{5} =$  .....  
 $\frac{4}{5}$   $\frac{2}{5}$   $\frac{6}{5}$

e)  $\frac{6}{8} - \frac{2}{8}$  .....  $\frac{3}{8}$   
 > < =

2 Complete:

a)  $\frac{3}{9} + \frac{5}{9} =$  .....

b)  $1 - \frac{4}{6} =$  .....

c)  $\frac{6}{14} - \frac{5}{14} =$  .....

d)  $\frac{5}{8} - \frac{1}{8} = \frac{3}{8} + \frac{...}{8}$

e)  $\frac{5}{8} + \frac{...}{...} = 1$

# ELIAS

## Chapter 4

### Lesson 1

*Equivalent fractions*

### Lesson 2

*Find the missing equivalent fraction*



# Lesson 1

## Equivalent fractions



### Equivalent fractions

- **Equivalent fractions** are fractions that look different but they have the same value.

Fraction	Number line	Strips	Model
$\frac{1}{2}$			
$\frac{2}{4}$			
$\frac{3}{6}$			
$\frac{4}{8}$			

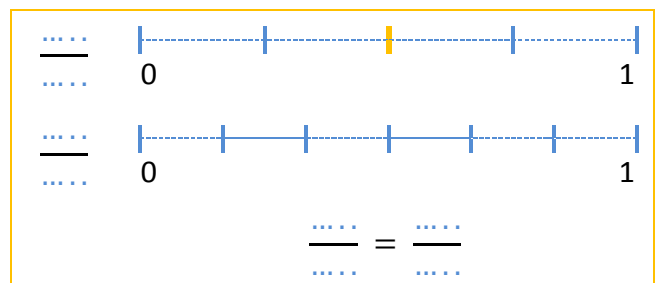
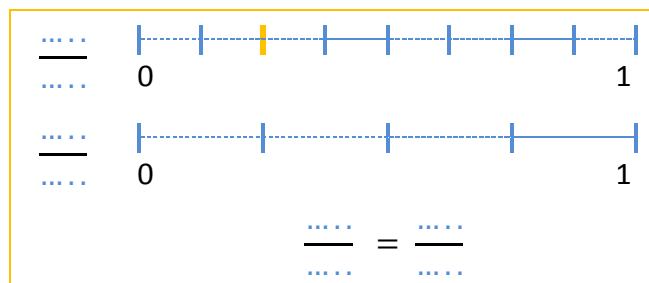
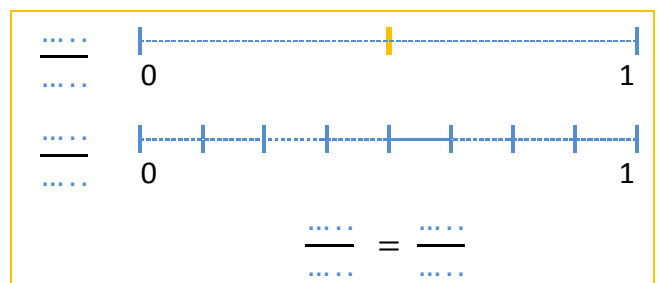
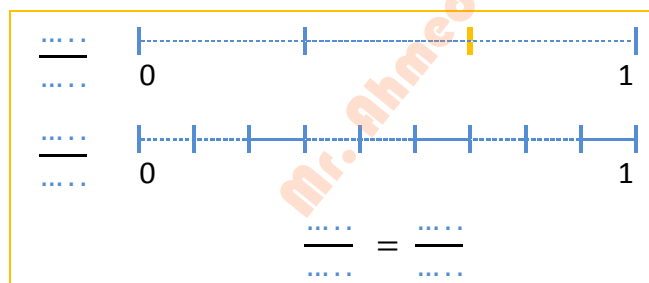
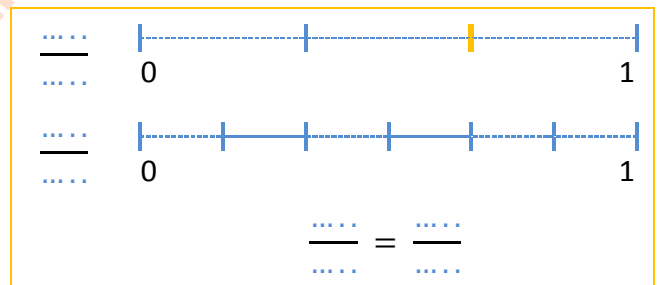
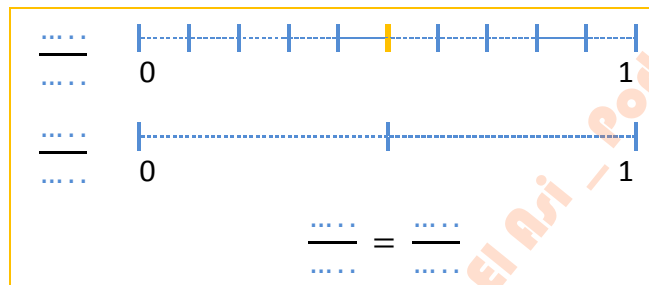
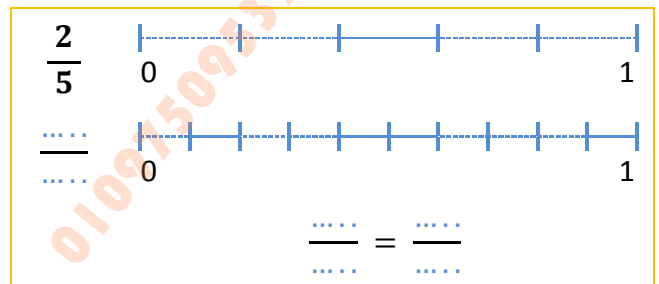
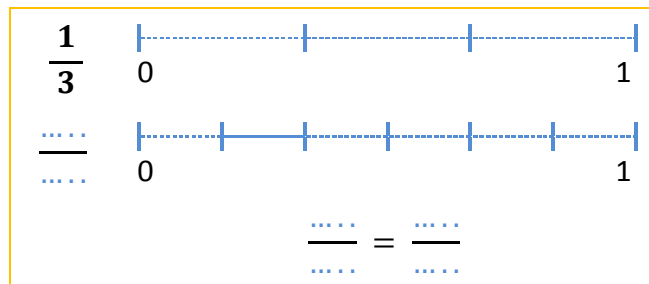
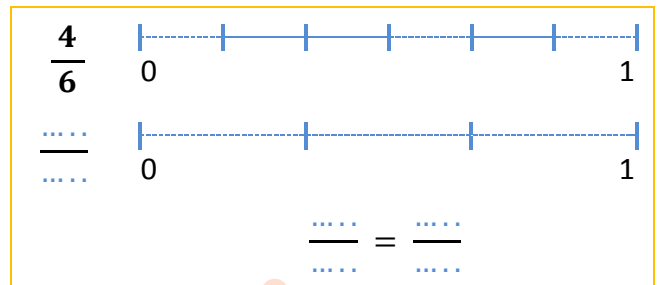
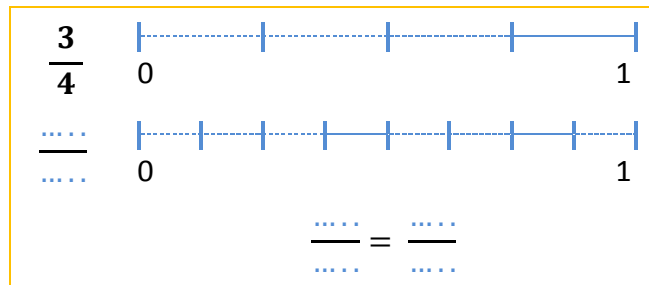
- $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} \Rightarrow$  equivalent fractions

- Identify meaning of equivalent fractions.



## Exercises: Equivalent fractions

### 1 Use the number line to find the equivalent fraction:




### Main objectives:

- Find the equivalent fraction by using number line.


## Exercises: Equivalent fractions

### 2 Use the strips to find the equivalent fraction:

$\frac{2}{5}$




.....




.....

..... = .....

$\frac{1}{2}$




.....




.....

..... = .....

$\frac{1}{3}$




.....




.....

..... = .....

$\frac{3}{4}$



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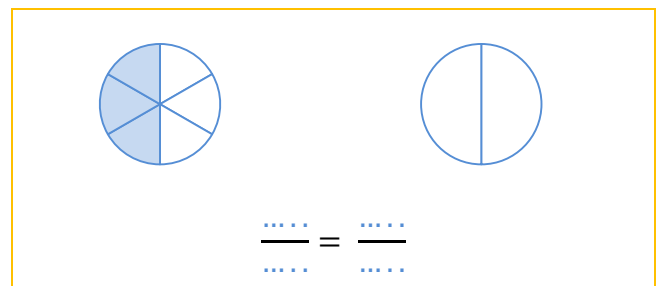
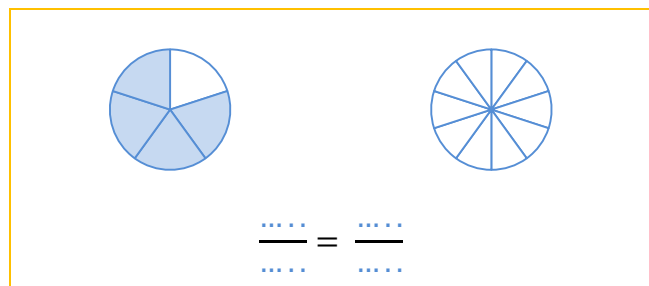
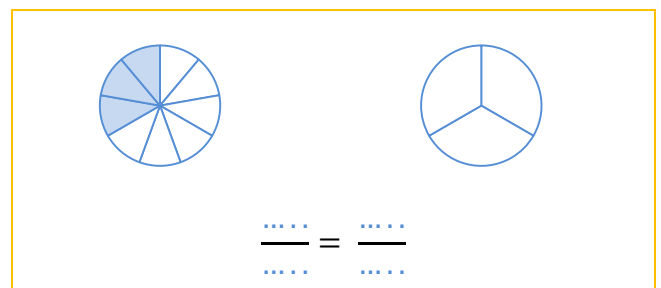
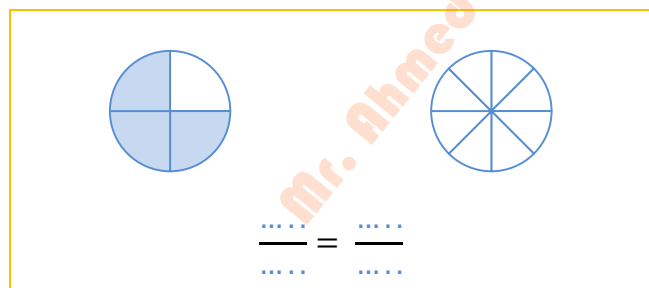
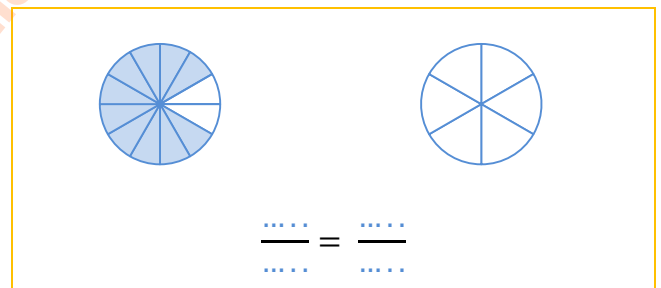
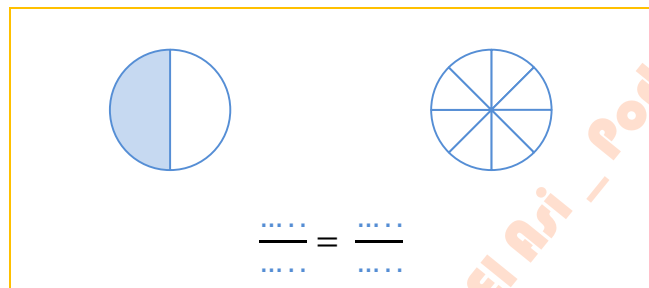
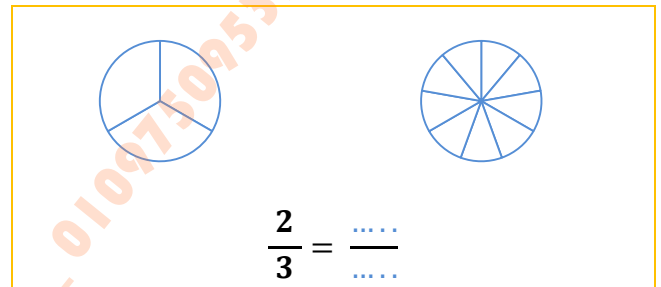
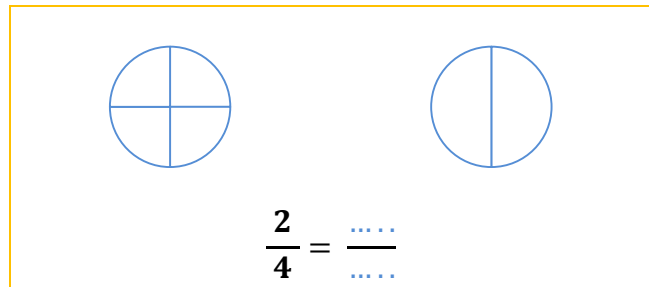
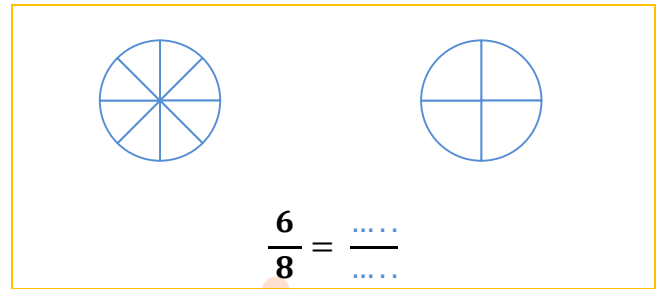
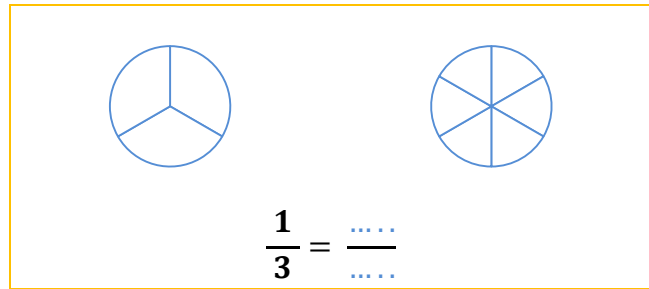


.....

..... = .....

## Exercises: Equivalent fraction

### 3 Use the models to find the equivalent fraction:



### Main objectives:

- Find the equivalent fraction by using models.

## Lesson 2

## Find the missing equivalent fraction



### Find equivalent fractions using multiply or divide

- We can multiply or divide **both** the numerator and the denominator of a fraction by any number except zero to find equivalent fraction.

$\frac{2}{3} = \frac{6}{9}$	$\frac{4}{8} = \frac{1}{2}$
<p>Diagram showing the conversion of <math>\frac{2}{3}</math> to <math>\frac{6}{9}</math> by multiplying both numerator and denominator by 3.</p>	<p>Diagram showing the conversion of <math>\frac{4}{8}</math> to <math>\frac{1}{2}</math> by dividing both numerator and denominator by 4.</p>

### 1 Complete:

<p>Diagram showing the conversion of <math>\frac{2}{5}</math> to <math>\frac{6}{15}</math> by multiplying both numerator and denominator by 3.</p>	<p>Diagram showing the conversion of <math>\frac{3}{4}</math> to <math>\frac{6}{8}</math> by multiplying both numerator and denominator by 2.</p>	<p>Diagram showing the conversion of <math>\frac{8}{12}</math> to <math>\frac{2}{3}</math> by dividing both numerator and denominator by 4.</p>	<p>Diagram showing the conversion of <math>\frac{15}{20}</math> to <math>\frac{3}{4}</math> by dividing both numerator and denominator by 5.</p>
<p>Diagram showing the conversion of <math>\frac{1}{3}</math> to <math>\frac{4}{12}</math> by multiplying both numerator and denominator by 4.</p>	<p>Diagram showing the conversion of <math>\frac{3}{6}</math> to <math>\frac{15}{30}</math> by multiplying both numerator and denominator by 5.</p>	<p>Diagram showing the conversion of <math>\frac{3}{6}</math> to <math>\frac{1}{2}</math> by dividing both numerator and denominator by 3.</p>	<p>Diagram showing the conversion of <math>\frac{6}{18}</math> to <math>\frac{1}{3}</math> by dividing both numerator and denominator by 6.</p>
<p>Diagram showing the conversion of <math>\frac{6}{7}</math> to <math>\frac{12}{14}</math> by multiplying both numerator and denominator by 2.</p>	<p>Diagram showing the conversion of <math>\frac{1}{2}</math> to <math>\frac{3}{6}</math> by multiplying both numerator and denominator by 3.</p>	<p>Diagram showing the conversion of <math>\frac{6}{10}</math> to <math>\frac{3}{5}</math> by dividing both numerator and denominator by 2.</p>	<p>Diagram showing the conversion of <math>\frac{9}{15}</math> to <math>\frac{3}{5}</math> by dividing both numerator and denominator by 3.</p>

- Find the missing numerator or denominator in equivalent fraction.

## Find the missing equivalent fraction



### Find missing numerator or denominator in equivalent fraction

- To find the missing numerator, determine what is the number that the denominator is multiplied or divided by it, then do the same with numerator.

$\frac{3}{5} = \frac{?}{15}$	$\frac{2}{3} = \frac{4}{?}$

### 1 Complete the suitable operation:


### Main objectives:

- Find the missing numerator or denominator in equivalent fraction.

**Exercises:** Find the missing equivalent fraction

**2 Find the missing number:**

$$\frac{2}{7} = \frac{\dots}{14}$$

$$\frac{3}{\dots} = \frac{6}{8}$$

$$\frac{4}{\dots} = \frac{8}{16}$$

$$\frac{4}{6} = \frac{\dots}{3}$$

$$\frac{4}{6} = \frac{12}{\dots}$$

$$\frac{8}{10} = \frac{\dots}{3}$$

$$\frac{1}{4} = \frac{\dots}{20}$$

$$\frac{\dots}{15} = \frac{2}{3}$$

$$\frac{1}{5} = \frac{\dots}{10}$$

$$\frac{3}{6} = \frac{\dots}{2}$$

$$\frac{\dots}{2} = \frac{12}{20}$$

$$\frac{14}{16} = \frac{\dots}{8}$$

**3 Write two equivalent fraction:**

$$\frac{2}{3} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{1}{2} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{4}{5} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{3}{7} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{3}{6} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{4}{8} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{2}{5} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

$$\frac{2}{6} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

**Exercises:** Find the missing equivalent fraction

**4 Complete:**

$$\frac{3}{5} = \frac{\dots}{10} = \frac{6}{\dots} = \frac{\dots}{12}$$

$$\frac{2}{3} = \frac{4}{\dots} = \frac{\dots}{9} = \frac{8}{\dots}$$

$$\frac{1}{4} = \frac{2}{\dots} = \frac{3}{\dots} = \frac{\dots}{16}$$

$$\frac{2}{5} = \frac{6}{\dots} = \frac{8}{\dots} = \frac{\dots}{25}$$

$$\frac{5}{6} = \frac{10}{\dots} = \frac{\dots}{18} = \frac{\dots}{24}$$

$$\frac{1}{2} = \frac{\dots}{4} = \frac{\dots}{8} = \frac{5}{\dots}$$

$$\frac{2}{7} = \frac{\dots}{14} = \frac{6}{\dots} = \frac{\dots}{35}$$

$$\frac{3}{6} = \frac{6}{\dots} = \frac{\dots}{12} = \frac{12}{\dots}$$

**5 Choose the equivalent fraction:**

a)  $\frac{3}{6} = \dots$

$(\frac{3}{12}, \frac{6}{12}, \frac{6}{9}, \frac{6}{18})$

b)  $\frac{3}{4} = \dots$

$(\frac{3}{12}, \frac{4}{5}, \frac{15}{20}, \frac{2}{3})$

c)  $\frac{4}{8} = \dots$

$(\frac{2}{6}, \frac{4}{12}, \frac{2}{8}, \frac{1}{2})$

d)  $\frac{8}{10} = \dots$

$(\frac{4}{10}, \frac{4}{5}, \frac{2}{5}, \frac{6}{8})$

e)  $\frac{2}{5} = \dots$

$(\frac{2}{10}, \frac{6}{15}, \frac{4}{10}, \frac{4}{5})$

f)  $\frac{4}{12} = \dots$

$(\frac{12}{24}, \frac{3}{8}, \frac{8}{16}, \frac{1}{4})$

g)  $\frac{6}{18} = \dots$

$(\frac{2}{3}, \frac{1}{3}, \frac{2}{9}, \frac{3}{12})$

h)  $\frac{2}{7} = \dots$

$(\frac{6}{21}, \frac{4}{7}, \frac{2}{14}, \frac{1}{4})$

**Main objectives:**

- Find the missing numerator or denominator in equivalent fraction.

1 Choose:

a)  $\frac{2}{3} = \dots\dots$

$\frac{4}{8}$

$\frac{6}{12}$

$\frac{4}{6}$

b)  $\frac{5}{6} = \frac{\dots\dots}{12}$

7

10

12

c)  $1 = \frac{\dots\dots}{8}$

8

9

10

d)  $\frac{1}{2} = \frac{2}{4} = \frac{3}{\dots\dots}$

4

5

6

2 Color and complete the equivalent fraction:

$\frac{2}{6}$

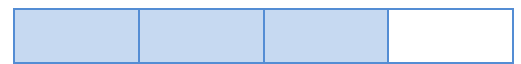


$\frac{\dots\dots}{\dots\dots}$



$\frac{\dots\dots}{\dots\dots} = \frac{\dots\dots}{\dots\dots}$

$\frac{3}{4}$



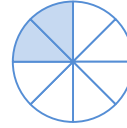
$\frac{\dots\dots}{\dots\dots}$



$\frac{\dots\dots}{\dots\dots} = \frac{\dots\dots}{\dots\dots}$



$\frac{5}{10} = \frac{\dots\dots}{\dots\dots}$



$\frac{2}{8} = \frac{\dots\dots}{\dots\dots}$



# ELIAS

## Chapter 5

### *Lesson 1*

*Perimeter and area*

### *Lesson 2*

*Find the missing length or width of rectangle or square*

### *Lesson 3*

*Perimeter and area of complex figures*





### Perimeter and Area

Perimeter	Area
<ul style="list-style-type: none"> <li>is the length of the line that outlines that shape.</li> </ul>	<ul style="list-style-type: none"> <li>The number of square units that needed to cover this shape.</li> </ul>
<b>Perimeter</b> = $4 + 2 + 4 + 2 = 12$ <b>cm</b>	<b>Area</b> = $4 \times 2 = 8$ <b>cm<sup>2</sup></b>

1

**Complete:**



Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>

- Find the perimeter and area of rectangle or square.

## Exercises: Perimeter and area



6 cm

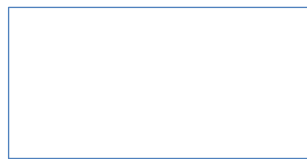
Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



7 cm

2 cm

Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



4 cm

8 cm

Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>



5 cm

Perimeter = ..... = ..... Cm  
Area = ..... = ..... Cm<sup>2</sup>

### 2 Complete:

- The **Area** of the square whose side length is 6 cm = ..... cm
- The **Area** of the rectangle whose length is 8 cm and width is 2 cm  
= ..... cm<sup>2</sup>
- The **perimeter** of the rectangle whose length is 8 cm and width is 2 cm  
= ..... cm
- The **perimeter** of the square whose side length is 4 cm = ..... cm
- The **area** of the square whose side length is 5 cm = ..... cm<sup>2</sup>
- The **perimeter** of the square whose side length is 7 cm = ..... cm

### Main objectives:

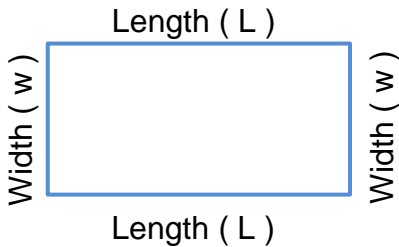
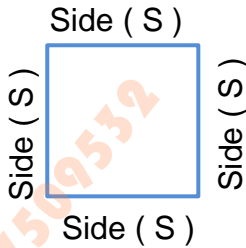
- Find the perimeter and area of rectangle and square.


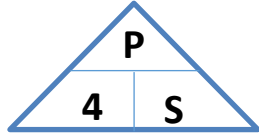
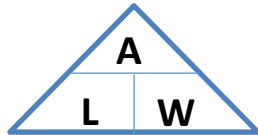
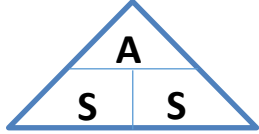
## Lesson 2

## Find the missing length or width of rectangle or square



### Perimeter and Area of rectangle and square

Rectangle	Square
<ul style="list-style-type: none"> <li>Each two opposite sides are equal in length.</li> </ul> 	<ul style="list-style-type: none"> <li>All sides are equal in length.</li> </ul> 

Perimeter of rectangle	$P = L + W + L + W$ $P = 2L + 2W$ $P = 2 \times (L + W)$	
Perimeter of square	$P = S + S + S + S$ $P = 4 \times S$	
Area of rectangle	$A = L \times W$	
Area of square	$A = S \times S$	

**Exercises:** Find the missing length or width of rectangle or square

**1 Complete:**

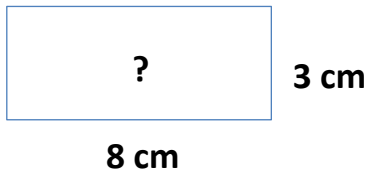
<div> <div>P = 18 cm</div> <div>?</div> <div>5 cm</div> <div>W = ..... cm</div> </div>	<div> <div>A = 15 cm<sup>2</sup></div> <div>?</div> <div>3 cm</div> <div>L = ..... cm</div> </div>	<div> <div>?</div> <div>6 cm</div> <div>2 cm</div> <div>P = ..... cm</div> </div>
<div> <div>?</div> <div>2 cm</div> <div>5 cm</div> <div>A = ..... cm<sup>2</sup></div> </div>	<div> <div>P = 20 cm</div> <div>6 cm</div> <div>?</div> <div>L = ..... cm</div> </div>	<div> <div>A = 21 cm<sup>2</sup></div> <div>?</div> <div>7 cm</div> <div>W = ..... cm</div> </div>
<div> <div>A = 27 cm<sup>2</sup></div> <div>?</div> <div>3 cm</div> <div>L = ..... cm</div> </div>	<div> <div>P = 22 cm</div> <div>?</div> <div>6 cm</div> <div>W = ..... cm</div> </div>	<div> <div>?</div> <div>3 cm</div> <div>6 cm</div> <div>P = ..... cm</div> </div>
<div> <div>A = 16 cm<sup>2</sup></div> <div>?</div> <div>8 cm</div> <div>W = ..... cm</div> </div>	<div> <div>?</div> <div>7 cm</div> <div>3 cm</div> <div>A = ..... cm<sup>2</sup></div> </div>	<div> <div>P = 24 cm</div> <div>8 cm</div> <div>?</div> <div>L = ..... cm</div> </div>

**Main objectives:**

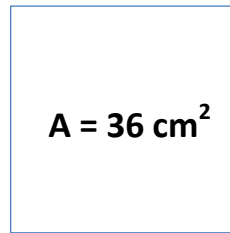
- Find the missing length or width of rectangle or square.

**Exercises:** Find the missing length or width of rectangle or square

<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>A = 25 \text{ cm}^2</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>	<div style="border: 1px solid black; width: 80px; height: 80px; margin: 10px auto;"></div> <p style="text-align: center;">3 cm</p> <p style="text-align: center;"><math>A = \dots\dots \text{ cm}^2</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>P = 12 \text{ cm}</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>
<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>P = 20 \text{ cm}</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>A = 16 \text{ cm}^2</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;">2 cm</p> <p style="text-align: center;"><math>A = \dots\dots \text{ cm}^2</math></p>
<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;">4 cm</p> <p style="text-align: center;"><math>A = \dots\dots \text{ cm}^2</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>P = 24 \text{ cm}</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>A = 36 \text{ cm}^2</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>
<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>A = 9 \text{ cm}^2</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>	<div style="border: 1px solid black; width: 80px; height: 80px; margin: 10px auto;"></div> <p style="text-align: center;">1 cm</p> <p style="text-align: center;"><math>A = \dots\dots \text{ cm}^2</math></p>	<div style="border: 1px solid black; width: 100px; height: 100px; margin: 10px auto;"></div> <p style="text-align: center;"><math>P = 28 \text{ cm}</math></p> <p style="text-align: center;"><math>S = \dots\dots \text{ cm}</math></p>

**Exercises:***Find the missing length or width of rectangle or square*

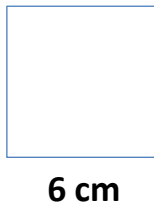
$$A = \dots\dots \text{cm}^2$$



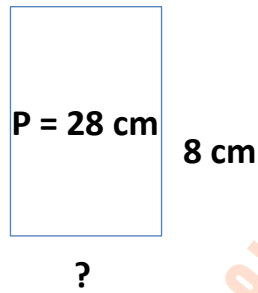
$$S = \dots\dots \text{cm}$$



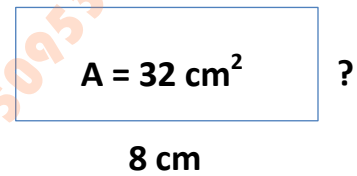
$$A = \dots\dots \text{cm}^2$$



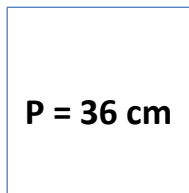
$$A = \dots\dots \text{cm}^2$$



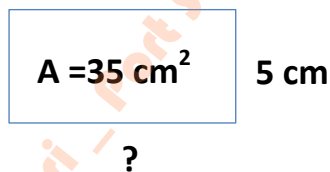
$$L = \dots\dots \text{cm}$$



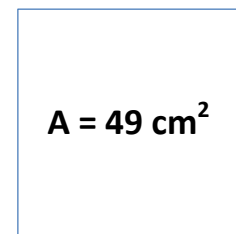
$$W = \dots\dots \text{cm}$$



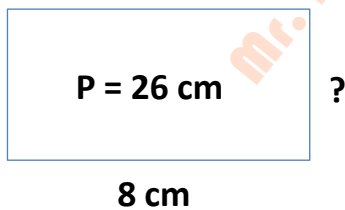
$$S = \dots\dots \text{cm}$$



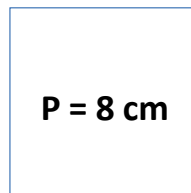
$$L = \dots\dots \text{cm}$$



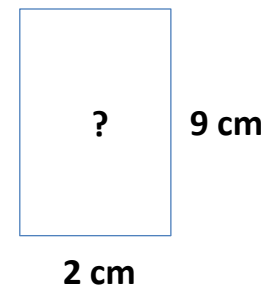
$$S = \dots\dots \text{cm}$$



$$W = \dots\dots \text{cm}$$



$$S = \dots\dots \text{cm}$$



$$P = \dots\dots \text{cm}$$

**Main objectives:**

- Find the missing length or width of rectangle or square.

**2 Choose:**

a) The **perimeter** of the square whose side length is 5 cm = ..... cm

10

15

20

25

b) The **perimeter** of the rectangle whose length is 7 cm and width is 3 cm  
= ..... cm

10

20

30

40

c) The **side length** of the square whose perimeter is 12 cm = ..... cm

3

4

5

6

d) The **width** of the rectangle whose length is 5 cm and perimeter is 18 cm  
= ..... cm

2

3

4

5

e) The **side length** of the square whose Area is 9 cm<sup>2</sup> = ..... cm

1

2

3

4

**3 Complete:**

a) The **side length** of the square whose perimeter is 20 cm = ..... cm

b) The **length** of the rectangle whose width is 4 cm and perimeter is 18 cm  
= ..... cm

c) The **perimeter** of the square whose side length is 6 cm = ..... cm

d) The **perimeter** of the rectangle whose length is 8 cm and width is 2 cm  
= ..... cm

e) The **area** of the square whose side length is 5 cm = ..... cm<sup>2</sup>





## Perimeter and Area

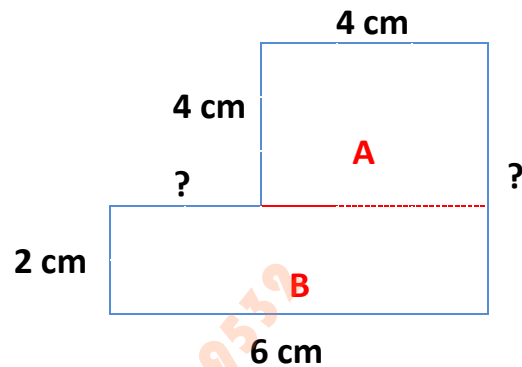
To find the area of complex figures we separate the figure into regular shapes.

### Example:

Find the area and the perimeter of the figure?

### Solve:

$$\begin{aligned}\text{Area of the figure} &= \text{Area A} + \text{Area B} \\ &= (4 \times 4) + (2 \times 6) \\ &= 16 + 12 = 28 \text{ cm}^2\end{aligned}$$



$$\text{Perimeter of the figure} = 4 + 6 + 6 + 2 + 2 + 4 = 24 \text{ cm}$$

## 1 Complete:

Perimeter = ..... Cm  
Area = ..... Cm<sup>2</sup>

Perimeter = ..... Cm  
Area = ..... Cm<sup>2</sup>

Perimeter = ..... m  
Area = ..... m<sup>2</sup>

Perimeter = ..... Cm  
Area = ..... Cm<sup>2</sup>

### Main objectives:

- Find the area and perimeter of complex figures.

1 Choose:

a) The **perimeter** of the rectangle whose length is 6 cm and width is 2 cm = ..... cm

12

16

20

24

b) The **side length** of the square whose perimeter is 20 cm = ..... cm

3

4

5

6

a) The **width** of the rectangle whose length is 4 cm and perimeter is 18 cm = ..... cm

2

3

4

5

a) The **side length** of the square whose Area is 16 cm<sup>2</sup> = ..... cm

1

2

3

4

a) The **length** of the rectangle whose width is 7 cm and perimeter is 24 cm = ..... cm

5

6

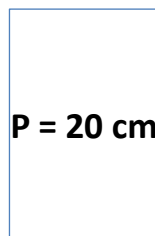
7

2 Complete:



5 cm

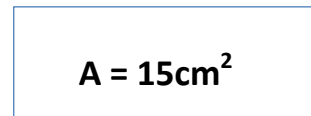
A = ..... cm<sup>2</sup>



6 cm

?

L = ..... cm



?

5 cm

W = ..... cm

# ELIAS

## Chapter 6

- Lesson 1** *Place value and value*
- Lesson 2** *Forms of the number*
- Lesson 3** *Comparing and ordering numbers*
- Lesson 4** *Graphs*
- Lesson 5** *Measuring length*
- Lesson 6** *Elapsed time*
- Lesson 7** *Main four operations*





## Place value and value

- The value of each digit in any number depends on its place in this number.

352,674						
	3	5	2	7	6	4
Place value	Hundred thousands	Ten thousands	thousands	hundreds	tens	ones
Value	300,000	50,000	2,000	700	60	4



## Forms of the number

- Standard form:** 352,674
- Expanded form:**  $300,000 + 50,000 + 2,000 + 600 + 70 + 4$
- Word form:** three hundred fifty two thousand, six hundred seventy four



## Notes:

Tens replaced with 0

Ex: 3 tens = 30

Hundreds replaced with 00

Ex: 5 hundreds = 500

Thousands replaced with 000

Ex: 2 thousands = 2,000



## Numbers

Ones		From 11 to 19		Tens	
1	one	11	eleven	10	ten
2	two	12	twelve	20	twenty
3	three	13	thirteen	30	thirty
4	four	14	fourteen	40	forty
5	five	15	fifteen	50	fifty
6	six	16	sixteen	60	sixty
7	seven	17	seventeen	70	seventy
8	eight	18	eighteen	80	eighty
9	nine	19	nineteen	90	ninety

- Reviews on place value and value.

## Exercises: Place value and value

### 1 Complete:

Number	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
25,416						
106,452						
3,891						
7,245						
111,372						
973						
36,970						
819,553						

### 2 Underline the digit which represent the given place value:

ten thousands	3 <u>4</u> 1,125
Hundreds	862,109
Tens	54,137
Thousands	6,378
Ones	14,452
Ten thousands	23,500
Hundreds	4,506
Thousands	35,197
Tens	2,983

Ones	7,451
Ten thousands	62,519
Tens	25,804
Hundred thousands	126,107
Ones	3,785
Thousands	12,563
Hundreds	1,109
Ten thousands	421,349
Hundred thousands	598,043

### Main objectives:

- Reviews on place value and value.

## Exercises: Place value and value

### 3 Complete:

Number	Place value	Value
5 <u>4</u> 1,362		
76,2 <u>5</u> 3		
12 <u>3</u> ,508		
<u>3</u> 3,569		
56,8 <u>0</u> 2		
917, <u>0</u> 04		
23,5 <u>5</u> 8		
<u>1</u> 10,609		
45,27 <u>1</u>		
<u>5</u> ,893		
78, <u>8</u> 83		
<u>3</u> 96		
4, <u>3</u> 60		
5 <u>1</u> 1,870		
4 <u>8</u> ,206		
<u>1</u> 56,394		
78, <u>0</u> 27		
<u>4</u> 36,879		
2 <u>1</u> ,907		

Number	Place value	Value
<u>2</u> 30,035		
<u>4</u> 0,630		
5 <u>8</u> ,782		
157, <u>6</u> 91		
<u>3</u> 99,126		
<u>4</u> 52		
<u>3</u> 76,245		
<u>1</u> 22,705		
46, <u>0</u> 05		
<u>8</u> 1,359		
402, <u>1</u> 03		
<u>5</u> 13,827		
920, <u>1</u> 16		
<u>4</u> ,789		
<u>2</u> 5,235		
<u>1</u> ,3 <u>0</u> 0		
70, <u>1</u> 82		
<u>3</u> 4,894		
2, <u>4</u> 50		

## Exercises: Place value and value

### 4 Choose:

- a) The **value** of the digit 6 in the number 3,670 is .....  
6                      60                      600                      6,000
- b) The **place value** of the digit 7 in the number 457,201 is .....  
Ones                      Tens                      Hundreds                      Thousands
- c) The **value** of the digit 8 in the number 38,129 is .....  
80                      800                      8,000                      80,000
- d) The digit in the place **ten thousands** in the number 126,539 is .....  
2                      3                      5                      6
- e) The **place value** of the digit 4 in the number 465,983 is .....  
Hundreds                      Thousands                      Ten thousands                      Hundred thousands
- f) The digit in the place **thousands** in the number 75,609 is .....  
0                      5                      7                      6
- g) The **value** of the digit 2 in the number 29,140 is .....  
200                      2,000                      20,000                      200,000
- h) The **place value** of the digit 8 in the number 580,231 is .....  
Hundreds                      Thousands                      Ten thousands                      Hundred thousands
- i) The digit in the place **hundred thousands** in the number 971,320 is .....  
3                      7                      9                      1
- j) The **value** of the digit 3 in the number 319,207 is .....  
300                      3,000                      30,000                      300,000
- k) The **place value** of the digit 1 in the number 12,089 is .....  
Hundreds                      Thousands                      Ten thousands                      Hundred thousands

### Main objectives:

- Reviews on place value and value.

## Exercises: Place value and value

### 5 Complete:

3 hundreds = .....

40 tens = .....

7 thousands = .....

20 hundreds = .....

900 thousands = .....

500 hundreds = .....

4 ten thousands = .....

60,000 tens = .....

100 thousands = .....

3 hundred thousands = .....

8,000 tens = .....

30 thousands = .....

2 tens = .....

10 hundreds = .....

70 ten thousands = .....

6 hundreds = ..... tens

40 tens = ..... hundreds

3 thousands = ..... tens

50 hundreds = ..... thousands

40 hundreds = ..... tens

500 tens = ..... hundreds

900 hundreds = ..... tens

6,000 tens = ..... thousands

70 hundreds = ..... tens

20,000 = ..... thousands

700 = ..... tens

400 hundreds = ..... thousands

80 thousands = ..... hundreds

30 = ..... tens

1,000 = ..... hundreds



**1** Write in expanded form:

63,741	.....
5,305	.....
17,890	.....
257,829	.....
9,611	.....
300,500	.....
40,593	.....
523,718	.....
6,720	.....
70,000	.....
2,008	.....
70,799	.....
543,702	.....
730,026	.....
39,410	.....
10,521	.....
88,332	.....
15,909	.....
365,982	.....
1,112	.....

**Main objectives:**

- Reviews on forms of the number.

## Exercises: Forms of the number

### 2 Write in standard form:

$300,000 + 20,000 + 4,000 + 200 + 10 + 5$	.....
$50,000 + 6,000 + 800 + 30 + 2$	.....
$80,000 + 2,000 + 500 + 90 + 7$	.....
$3,000 + 200 + 10 + 5$	.....
$4,000 + 600 + 7 + 30,000 + 20$	.....
$2,000 + 100 + 500,000 + 60 + 1 + 80,000$	.....
$70 + 300 + 4,000 + 9$	.....
$600,000 + 20 + 300 + 10,000 + 9,000 + 4$	.....
$320,000 + 4,000 + 200 + 10 + 5$	.....
$3,000 + 200 + 15$	.....
$300,000 + 24,000 + 200 + 10 + 5$	.....
$50,000 + 6,000 + 832$	.....
$90,000 + 3,000 + 10 + 2$	.....
$80,000 + 5$	.....
$600,000 + 60,000 + 2,000 + 800 + 5$	.....
$40,000 + 9,000 + 700 + 30 + 6$	.....
$300,000 + 400 + 20 + 8$	.....
$900,000 + 7,000 + 800 + 20 + 4$	.....
$600,000 + 10,000 + 5,000 + 30 + 8$	.....
$5,000 + 100 + 10 + 400,000 + 3$	.....
$60,000 + 7,000 + 900 + 50$	.....
$20 + 60,000 + 8 + 500 + 300,000$	.....

## Exercises: Forms of the number

### 3 Write in word form:

54,236	.....
7,120	.....
18,205	.....
238,981	.....
8,911	.....
700,400	.....
409,123	.....
817,009	.....
7,030	.....
50,000	.....
56,008	.....
34,347	.....
198,235	.....
769,093	.....
11,312	.....
100,237	.....
93,341	.....
155,203	.....
365,982	.....
10,450	.....

### Main objectives:

- Reviews on forms of the number.

**4** *Write in standard form:*

thirty six thousand, nine hundred forty-one	.....
seven hundred fifty-two thousand, six hundred-twenty	.....
five hundred thousand, three hundred thirty-one	.....
six thousand, four hundred one	.....
eighty thousand, two hundred eleven	.....
fifty thousand	.....
two thousand, five	.....
one hundred twenty-six thousand, four hundred thirteen	.....
three hundred forty-two	.....
seventeen thousand, one hundred twelve	.....
forty five thousand, six hundred ninety-three	.....
five hundred thousand, sixteen	.....
sixty thousand, thirty-two	.....
eight hundred seventy-one thousand, five hundred twenty-six	.....
nine thousand, six hundred	.....
ten thousand, five hundred one	.....
fifty-two thousand, thirty-four	.....
ninety two thousand, four hundred sixty-three	.....
one hundred sixty-five thousand, thirty-five	.....
eight hundred seventy-two	.....

**1** Compare by using  $>$ ,  $<$ ,  $=$ 

367,208		789,112
---------	--	---------

235,267		45,362
---------	--	--------

67,378		154,290
--------	--	---------

4,679		3,839
-------	--	-------

20,349		21,045
--------	--	--------

625,672		625,075
---------	--	---------

129,733		99,235
---------	--	--------

59,200		59,200
--------	--	--------

88,211		90,329
--------	--	--------

6,903		42,331
-------	--	--------

35,870		35,670
--------	--	--------

12,099		111,321
--------	--	---------

459,093		67,087
---------	--	--------

234,567		27,903
---------	--	--------

65,232		64,237
--------	--	--------

679,456		88,432
---------	--	--------

11,780		12,904
--------	--	--------

651,628		651,628
---------	--	---------

123,008		123,005
---------	--	---------

45,075		47,234
--------	--	--------

43,906		81,345
--------	--	--------

335,782		23,567
---------	--	--------

980,221		937,234
---------	--	---------

675,900		101,235
---------	--	---------

34,943		34,943
--------	--	--------

720,529		454,721
---------	--	---------

200,908		20,998
---------	--	--------

6,762		45,870
-------	--	--------

112,760		340,236
---------	--	---------

453,609		43,569
---------	--	--------

**Main objectives:**

- Reviews on comparing and ordering numbers.

## Exercises: Comparing and ordering numbers

### 2 Compare by using $>$ , $<$ or $=$

456,256		thirty six thousand, four hundred sixty
$500,000 + 40,000 + 600 + 20 + 1$		982,230
five hundred twenty thousand, nine hundred forty two		615,945
541,432		eighty one thousand, four hundred seventy three
$30,000 + 5,000 + 200 + 10 + 4$		thirty five thousand, two hundred fourteen
nine hundred thousand, seven hundred forty six		789,325
672,038		$600,000 + 70,000 + 2,000 + 100 + 30 + 8$
$200,000 + 70,000 + 500 + 30 + 1$		67,642
956,231		$900,000 + 3,000 + 300 + 60 + 5$
five hundred thousand, three		seven hundred twenty four
45,782		$400,000 + 10,000 + 2,000 + 300$
$6,000 + 700 + 40 + 9$		60,739
$100,000 + 1,000 + 600 + 20 + 9$		$100,000 + 10,000 + 600 + 20 + 9$
30,561		three thousand, five hundred sixty one
$30,000 + 5,000 + 200 + 10 + 4$		250,274

## Exercises: Comparing and ordering numbers

### 3 Order the numbers in ascending order:

	87,672	780,323	35,073	451,982
The order:	.....	.....	.....	.....
	46,672	289,045	72,983	30,659
The order:	.....	.....	.....	.....
	12,567	9,450	10,406	71,342
The order:	.....	.....	.....	.....
	55,218	199,530	670,325	9,321
The order:	.....	.....	.....	.....
	45,241	672,321	45,341	321,560
The order:	.....	.....	.....	.....

### 4 Order the numbers in descending order:

	76,239	52,459	23,789	78,902	49,721
The order:	.....	.....	.....	.....	.....
	620,653	43,789	67,670	923,287	679,326
The order:	.....	.....	.....	.....	.....
	5,892	891,583	23,875	98,457	112,005
The order:	.....	.....	.....	.....	.....
	93,672	74,231	930,672	93,342	58,094
The order:	.....	.....	.....	.....	.....

#### Main objectives:

- Reviews on comparing and ordering numbers.

**Exercises:** Comparing and ordering numbers

**5** Write the greatest and the smallest number from the given digit:

6

5

7

8

Greatest number: .....

Smallest number: .....

3

2

6

0

5

Greatest number: .....

Smallest number: .....

1

0

9

2

7

Greatest number: .....

Smallest number: .....

6

5

3

2

3

8

Greatest number: .....

Smallest number: .....

4

0

2

7

Greatest number: .....

Smallest number: .....

5

7

2

9

3

9

Greatest number: .....

Smallest number: .....

4

8

0

1

Greatest number: .....

Smallest number: .....

9

3

7

0

2

6

Greatest number: .....

Smallest number: .....

0

3

2

5

1

Greatest number: .....

Smallest number: .....

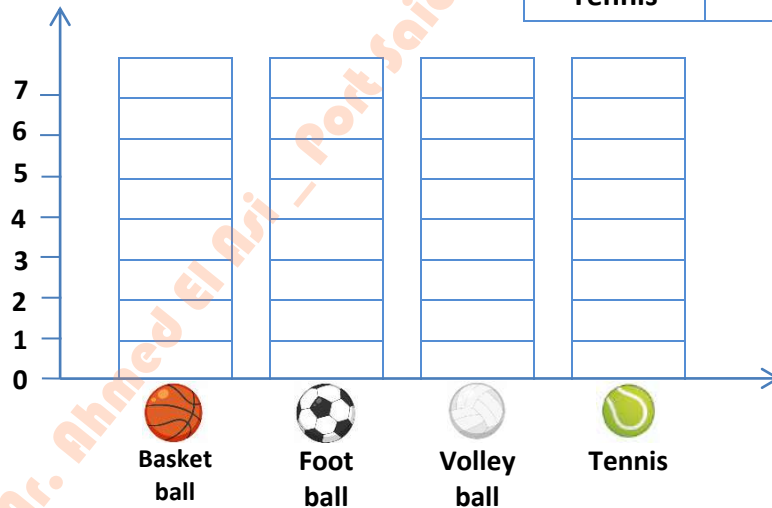


## 1 Represent by a bar graph:

This is a survey about favorite sports in the class:


Football	Handball	Volleyball
Handball	Tennis	Football
Volleyball	Football	Handball
Football	Handball	Volleyball
Tennis	Football	Football
Football	Handball	

sport	tally	Number
 Basketball		.....
 Football		.....
 Volleyball		.....
 Tennis		.....



What is the **most** favorite sport? .....

What is the **least** favorite sport? .....

How many students liked  ? .....

How many students in all liked  **and**  ? .....

How many more students liked  **than**  ? .....

### Main objectives:

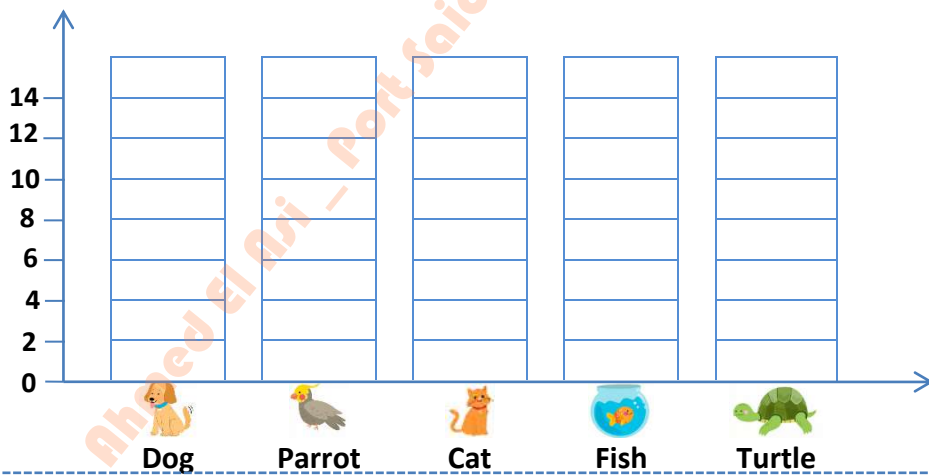
- Reviews on graphs.

## 2 Represent by a bar graph

This is a survey about favorite pets in the class:

Cat Dog Cat Fish  
Cat Fish Dog Parrot  
Dog Parrot Cat Turtle  
Cat Fish Dog Cat  
Parrot Dog Cat Dog  
Cat Turtle Parrot Fish

Pets	tally	Number
 Dog		.....
 Parrot		.....
 Cat		.....
 Fish		.....
 Turtle		.....



What is the **most** favorite pet?

.....

What is the **least** favorite pet?

.....

How many students liked  ?

.....

How many students in all liked  **and**  ?





.....

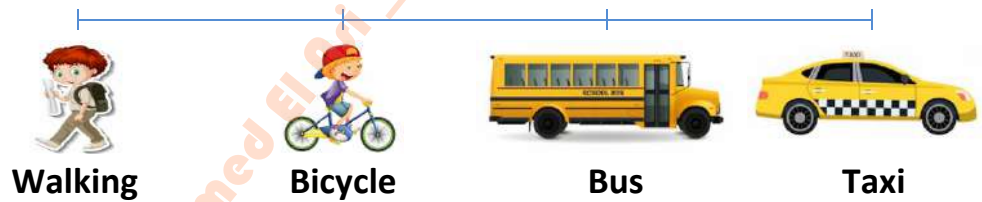
How many more students liked  **than**  ?

.....

### 3 Represent by a line plot:

This is a survey about favorite transportation:

Marks	tally	Number
 Walking		.....
 Bicycle		.....
 Bus		.....
 Taxi		.....



Key: x = 1

What is the **most** frequency transportation?

.....

What is the **least** frequency transportation?

.....

How many students get  ?

.....

How many students in all liked  **and**  ?

.....





How many more students liked  **than**  ?

.....








#### Main objectives:

- Reviews on graphs.

## 1 Measure the length of each object:

object	measure
	..... cm
	..... cm
	..... cm
	..... cm

## 2 Measure the length of each line:

Line	measure
	..... cm
	..... cm
	..... cm
	..... cm
	..... cm
	..... cm
	..... cm

- Reviews on measuring length.



## Elapsed time

- Elapsed time is the time that passes from the start to the end of an event.

**EX:** we start the period at 5:00 and end at 7:00

The elapsed time is 2 hours





## Note

1 hour = 60 minutes

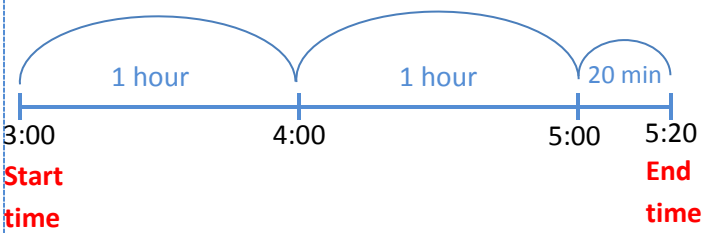


## Ways to find elapsed time

**EX:** Omar arrived the training at 3:00 P.M. he leaved the training at 5:20 P.M.  
How long did he spend at the training?

Start time	End time
	
3:00	5:20

**Solve:**









First way	Second way
	$\begin{array}{r} 5:20 \\ - 3:00 \\ \hline 2:20 \end{array}$
Omar spent 2 hours and 20 minutes	

## Main objectives:

- Reviews on elapsed time.

## Exercises: Elapsed time

### 1 Use the clock to find the elapsed time:

Start time	End time	Elapsed time
 7:00	 9:25	
Start time	End time	Elapsed time
 2:00	 5:15	
Start time	End time	Elapsed time
 3:20	 4:45	
Start time	End time	Elapsed time
 6:15	 9:35	

2 Find the elapsed time:

Start time	End time	Elapsed time
3:00	5:45	
7:10	9:30	
1:25	2:45	
2:15	4:15	

3 Find the elapsed time:

- a) The football game started at **6:00** and finish at **8:10**  
What is the elapsed time?  
.....  
.....
- b) Amir went to the zoo and he arrived at **9:20** .He left at **11:35**  
What is the elapsed time?  
.....  
.....
- c) Salma made a cake. She put the cake in the oven at **3:10**. It takes **25** minutes to well done.  
What time will the cake finish?  
.....  
.....
- d) Ahmed spent **40** minutes at karate practice. He finished at **7:55**  
what time did he start?  
.....  
.....

### 1 Find the result:

$$\begin{array}{r} 36,245 \\ + 24,321 \\ \hline \end{array}$$

$$\begin{array}{r} 46,702 \\ - 14,601 \\ \hline \end{array}$$

$3 \times 7 = \dots\dots\dots$

$8 \div 2 = \dots\dots\dots$

$2 \times 5 = \dots\dots\dots$

$36 \div 4 = \dots\dots\dots$

$6 \times 6 = \dots\dots\dots$

$28 \div 7 = \dots\dots\dots$

$$\begin{array}{r} 24,023 \\ + 16,578 \\ \hline \end{array}$$

$$\begin{array}{r} 36,435 \\ - 12,603 \\ \hline \end{array}$$

$1 \times 5 = \dots\dots\dots$

$4 \div 4 = \dots\dots\dots$

$4 \times 4 = \dots\dots\dots$

$18 \div 6 = \dots\dots\dots$

$4 \times 10 = \dots\dots\dots$

$50 \div 5 = \dots\dots\dots$

$$\begin{array}{r} 62,359 \\ + 5,100 \\ \hline \end{array}$$

$$\begin{array}{r} 97,536 \\ - 38,290 \\ \hline \end{array}$$

$5 \times 5 = \dots\dots\dots$

$25 \div 5 = \dots\dots\dots$

$2 \times 6 = \dots\dots\dots$

$2 \div 2 = \dots\dots\dots$

$7 \times 7 = \dots\dots\dots$

$36 \div 6 = \dots\dots\dots$

$$\begin{array}{r} 85,278 \\ + 42,061 \\ \hline \end{array}$$

$$\begin{array}{r} 10,509 \\ - 8,143 \\ \hline \end{array}$$

$8 \times 9 = \dots\dots\dots$

$54 \div 6 = \dots\dots\dots$

$2 \times 3 = \dots\dots\dots$

$18 \div 2 = \dots\dots\dots$

$6 \times 8 = \dots\dots\dots$

$21 \div 3 = \dots\dots\dots$

$$\begin{array}{r} 46,042 \\ + 26,527 \\ \hline \end{array}$$

$$\begin{array}{r} 64,200 \\ - 21,123 \\ \hline \end{array}$$

$6 \times 0 = \dots\dots\dots$

$24 \div 6 = \dots\dots\dots$

$4 \times 9 = \dots\dots\dots$

$12 \div 3 = \dots\dots\dots$

$3 \times 5 = \dots\dots\dots$

$35 \div 5 = \dots\dots\dots$

$$\begin{array}{r} 93,465 \\ + 30,170 \\ \hline \end{array}$$

$$\begin{array}{r} 87,729 \\ - 52,615 \\ \hline \end{array}$$

$1 \times 7 = \dots\dots\dots$

$15 \div 5 = \dots\dots\dots$

$4 \times 5 = \dots\dots\dots$

$16 \div 4 = \dots\dots\dots$

$3 \times 9 = \dots\dots\dots$

$7 \div 1 = \dots\dots\dots$



## Exercises: Main four operations

$\begin{array}{r} 16,705 \\ + 83,049 \\ \hline \end{array}$	$\begin{array}{r} 77,095 \\ - 65,429 \\ \hline \end{array}$	$3 \times 1 = \dots\dots\dots$ $2 \times 5 = \dots\dots\dots$ $8 \times 8 = \dots\dots\dots$	$24 \div 4 = \dots\dots\dots$ $6 \div 3 = \dots\dots\dots$ $5 \div 5 = \dots\dots\dots$
$\begin{array}{r} 27,055 \\ + 28,940 \\ \hline \end{array}$	$\begin{array}{r} 9,249 \\ - 3,521 \\ \hline \end{array}$	$4 \times 7 = \dots\dots\dots$ $7 \times 7 = \dots\dots\dots$ $5 \times 9 = \dots\dots\dots$	$10 \div 2 = \dots\dots\dots$ $15 \div 3 = \dots\dots\dots$ $30 \div 5 = \dots\dots\dots$
$\begin{array}{r} 63,540 \\ + 9,169 \\ \hline \end{array}$	$\begin{array}{r} 81,740 \\ - 23,106 \\ \hline \end{array}$	$2 \times 10 = \dots\dots\dots$ $3 \times 4 = \dots\dots\dots$ $5 \times 7 = \dots\dots\dots$	$21 \div 7 = \dots\dots\dots$ $6 \div 6 = \dots\dots\dots$ $16 \div 2 = \dots\dots\dots$
$\begin{array}{r} 22,208 \\ + 13,250 \\ \hline \end{array}$	$\begin{array}{r} 72,091 \\ - 43,503 \\ \hline \end{array}$	$10 \times 7 = \dots\dots\dots$ $7 \times 9 = \dots\dots\dots$ $2 \times 2 = \dots\dots\dots$	$45 \div 5 = \dots\dots\dots$ $8 \div 1 = \dots\dots\dots$ $12 \div 4 = \dots\dots\dots$
$\begin{array}{r} 6,346 \\ + 2,931 \\ \hline \end{array}$	$\begin{array}{r} 52,784 \\ - 4,123 \\ \hline \end{array}$	$9 \times 9 = \dots\dots\dots$ $3 \times 8 = \dots\dots\dots$ $0 \times 5 = \dots\dots\dots$	$12 \div 6 = \dots\dots\dots$ $4 \div 2 = \dots\dots\dots$ $28 \div 4 = \dots\dots\dots$
$\begin{array}{r} 39,728 \\ + 6,540 \\ \hline \end{array}$	$\begin{array}{r} 97,765 \\ - 4,329 \\ \hline \end{array}$	$6 \times 9 = \dots\dots\dots$ $2 \times 9 = \dots\dots\dots$ $4 \times 6 = \dots\dots\dots$	$10 \div 5 = \dots\dots\dots$ $24 \div 3 = \dots\dots\dots$ $12 \div 2 = \dots\dots\dots$

### Main objectives:

- Reviews on main four operations.

## Exercises: Main four operations

$\begin{array}{r} 7 \text{ , } 5 \text{ } 3 \text{ } 7 \\ + 2 \text{ , } 0 \text{ } 6 \text{ } 2 \\ \hline \end{array}$	$\begin{array}{r} 3 \text{ } 5 \text{ , } 0 \text{ } 7 \text{ } 6 \\ - 1 \text{ } 9 \text{ , } 1 \text{ } 2 \text{ } 6 \\ \hline \end{array}$	$7 \times 3 = \dots\dots\dots$ $3 \times 3 = \dots\dots\dots$ $5 \times 6 = \dots\dots\dots$	$30 \div 6 = \dots\dots\dots$ $9 \div 3 = \dots\dots\dots$ $20 \div 4 = \dots\dots\dots$
$\begin{array}{r} 8 \text{ } 4 \text{ , } 3 \text{ } 6 \text{ } 7 \\ + \quad 5 \text{ , } 2 \text{ } 5 \text{ } 3 \\ \hline \end{array}$	$\begin{array}{r} 9 \text{ , } 1 \text{ } 8 \text{ } 9 \\ - 4 \text{ , } 6 \text{ } 7 \text{ } 3 \\ \hline \end{array}$	$5 \times 1 = \dots\dots\dots$ $2 \times 8 = \dots\dots\dots$ $6 \times 7 = \dots\dots\dots$	$9 \div 1 = \dots\dots\dots$ $6 \div 2 = \dots\dots\dots$ $8 \div 4 = \dots\dots\dots$
$\begin{array}{r} 4 \text{ } 6 \text{ , } 0 \text{ } 7 \text{ } 5 \\ + 1 \text{ } 8 \text{ , } 9 \text{ } 8 \text{ } 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \text{ } 5 \text{ , } 4 \text{ } 2 \text{ } 8 \\ - 3 \text{ } 3 \text{ , } 2 \text{ } 1 \text{ } 4 \\ \hline \end{array}$	$3 \times 7 = \dots\dots\dots$ $2 \times 1 = \dots\dots\dots$ $3 \times 10 = \dots\dots\dots$	$20 \div 5 = \dots\dots\dots$ $18 \div 3 = \dots\dots\dots$ $56 \div 7 = \dots\dots\dots$
$\begin{array}{r} 5 \text{ } 3 \text{ , } 6 \text{ } 2 \text{ } 0 \\ + \quad 5 \text{ , } 3 \text{ } 4 \text{ } 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \text{ } 3 \text{ , } 8 \text{ } 7 \text{ } 2 \\ - 4 \text{ } 4 \text{ , } 3 \text{ } 0 \text{ } 9 \\ \hline \end{array}$	$6 \times 10 = \dots\dots\dots$ $8 \times 4 = \dots\dots\dots$ $3 \times 6 = \dots\dots\dots$	$32 \div 4 = \dots\dots\dots$ $2 \div 1 = \dots\dots\dots$ $27 \div 3 = \dots\dots\dots$
$\begin{array}{r} 7 \text{ , } 3 \text{ } 2 \text{ } 1 \\ + 1 \text{ } 4 \text{ , } 9 \text{ } 2 \text{ } 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \text{ , } 0 \text{ } 0 \text{ } 5 \\ - 4 \text{ , } 4 \text{ } 3 \text{ } 9 \\ \hline \end{array}$	$0 \times 8 = \dots\dots\dots$ $4 \times 8 = \dots\dots\dots$ $5 \times 8 = \dots\dots\dots$	$48 \div 8 = \dots\dots\dots$ $14 \div 2 = \dots\dots\dots$ $42 \div 6 = \dots\dots\dots$
$\begin{array}{r} 8 \text{ } 0 \text{ , } 0 \text{ } 4 \text{ } 0 \\ + 3 \text{ } 5 \text{ , } 3 \text{ } 0 \text{ } 6 \\ \hline \end{array}$	$\begin{array}{r} 1 \text{ } 6 \text{ , } 2 \text{ } 0 \text{ } 0 \\ - \quad 5 \text{ , } 1 \text{ } 1 \text{ } 6 \\ \hline \end{array}$	$9 \times 4 = \dots\dots\dots$ $7 \times 8 = \dots\dots\dots$ $2 \times 4 = \dots\dots\dots$	$49 \div 7 = \dots\dots\dots$ $40 \div 5 = \dots\dots\dots$ $72 \div 9 = \dots\dots\dots$

# ELIAS

## Final assessments

*Assessment 1      Model 1*

*Assessment 2      Model 2*

*Assessment 3      Model 3*



1 Choose:

a) The place value of the digit 3 in the number 56,345 is .....

Tens

Hundreds

Thousands

b) Which of the following represent associative property?

$$6 \times 7 = 7 \times 6$$

$$(3 \times 2) \times 5 = 3 \times (2 \times 5)$$

$$6 \times 6$$

c) The fraction that represents colored parts

half

third

fourth



d)  $\frac{1}{3}$  .....  $\frac{1}{5}$

>

<

=

e) The side length of the square whose perimeter is 24 cm = ..... cm

4

5

6

2 Complete:

a)  $1 - \frac{3}{7} = \dots\dots\dots$

b) The width of the rectangle whose length is 5 cm and perimeter is 16 cm = ..... cm

c)  $\frac{2}{5} = \frac{\dots\dots}{10}$

d) The standard form of the number  $40,000 + 3,000 + 500 + 70 + 1$  is .....

e)  $3 \times \dots\dots\dots = 21$

3 Answer the following:

a) Arrange the numbers in ascending order:

56,670

309,275

45,891

452,911

The order: ..... , ..... , ..... , .....

b) samir has 15 cookies. He gave his sister  $\frac{1}{3}$  of them.

How many cookies with her sister?

.....  
.....

c) find the Area of the following shape:



5 cm

A = ..... cm<sup>2</sup>

1 Choose:

- a) The **perimeter** of the rectangle whose length is 7 cm and width is 2 cm = ..... cm

12

16

18

- b)  $\frac{2}{5} < \dots$

$\frac{2}{6}$

$\frac{2}{3}$

$\frac{2}{7}$

- c) The **value** of the digit 8 in the number 148,259 is .....

800

8,000

80,000

- d) Which fraction represents the colored part



$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{5}$

- e) The following equation  $6 \times 4 = 4 \times 6$  is representing ..... Property.  
commutative                      associative                      distributive

2 Complete:

- a)  $3 \times 2 \times 5 = \dots$

- b)  $\frac{1}{4}$  of 12 = .....

- c) The **side length** of the square whose Area is  $25 \text{ cm}^2 = \dots$  cm

- d)  $\frac{2}{8} + \frac{5}{8} = \dots$

- e)  $1 = \frac{\dots}{5}$

3 Answer the following:

a) Find the product:

$$\begin{aligned} 5 \times 36 &= \dots \times (\dots + \dots) \\ &= (\dots \times \dots) + (\dots \times \dots) \\ &= \dots + \dots = \dots \end{aligned}$$

b) Find the width of the rectangle:

$$A = 20 \text{ cm}^2 \quad ?$$

5 cm

$$W = \dots \text{ cm}$$

c) Sara went to the mall and he arrived at 6:30 .she left at 8:45  
What is the elapsed time?

.....  
.....

1 Choose:

a)  $\frac{1}{3} + \frac{2}{3} = \dots$   
 $\frac{3}{6}$

$\frac{2}{3}$

1

b)  $7 \times 13 = 7 \times (\dots + 3)$   
 8

10

12

c)  $\frac{3}{4} = \dots$   
 $\frac{6}{8}$

$\frac{6}{12}$

$\frac{3}{12}$

d)  $1 = \dots$   
 $\frac{1}{3}$

$\frac{2}{3}$

$\frac{3}{3}$

e) The digit in the place **thousands** in the number **85,003** is .....  
 3                      4                      5

2 Complete:

a) The **side length** of the square whose perimeter is **28** cm = ..... cm

b) The **value** of the digit **5** in the number **34,652** is .....

c)  $\frac{6}{10} - \frac{2}{10} = \dots$

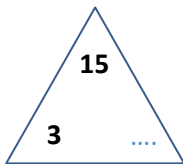
d)  $\frac{1}{3}$  of a day = .....

e) The product of **4** times **5** is .....



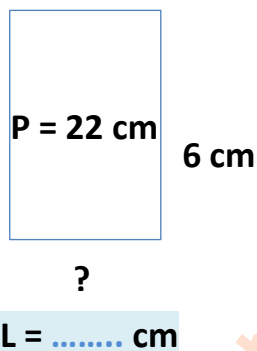
3 Answer the following

a) Complete:

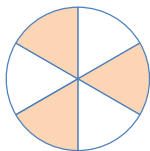


.....	×	.....	=	.....
.....	×	.....	=	.....
.....	÷	.....	=	.....
.....	÷	.....	=	.....

b) Find the length of the rectangle:



c) Write the name of each fraction:



.....  
..... = .....



.....  
..... = .....



.....  
..... = .....